Program Subject		Guri	Nanak Dev Engineering	College I II	iona		
Subject	m		Department of Information	Conege, Luan	iana		
MULC	Cade	TO CLICOLI	Semester	2 nd			
	Code	ESC-104	Subject Title	-			
Mid Ser	mester	1	Covers Covers	PPS			
rest (M	IST) No.		Course Coordinator(s)		eep Kaur,Er.1	Kuljeet Kaur,Er.Rar	ijodh Ka
Max. M	larks	24	The state of the s	Er. Jaswant	Singh, Er.Sic	lharth Jain	,
Date of	MST	31 March, 2023	Time Duration	1 hour 30 mi	inutes		
		1 March, 2023	Roll Number	0.0			
Note: A	ttempt all qu	lections	F	2210	1053		
Q. No.	The same of	iestions		2.0			
Q1 /	Write the		Question			COs, RBT level	Mari
-/	tinclude of	output of the following co	de:			CO4, L5	Mark
•	"Includes	Staio.h>				CO4, L3	2
	int main()						
	1						
	int mark					2	
	if (mark	s = 24)					
	if (0)	*					
	printf	(" Pass "); •					
	else					Commence of the Section of the Secti	
	printfe	(" Fail ");			3		
	11813-	,,,,					1
02		t diagram to avalated					
03	Compare E	love short to explain the o	components of computer syst	tem.		CO1, L2	-
02 03 Q4							2
Q.	The state of the	- steps of confiding and a	Vocuting a C J			CO1, L4	4
05 /	199 Compare	Symux error with logical	Arror	N		CO3, L4	4
Q5.	write a cod	le to print the following p	attern.	and the			
	· I I I I I I I I I I I I I I I I I I I			Company of the second	-	CO4, L6	4
	1 2				4.		
	1 2 3				21.6		
	1 2 3 4						
	1 2 3						
	1 2						
100	1					and the same of th	
Q6/	ھ) Write a c	ode to execute Assignmen	t operators and Relational op	1997		To Make San	
N. 424				perators.		CO4, L6, L2	8
Course	Outcomes (C	CO) Students will be able	o char name and Char nam	e [4] with exa	mple.	the state of the s	0
1	To formulate	e simple algorithm f			7		
2	To translate	the algorithms to	hmetic and logical problems				
3							
	To implement	execute the programs and	correct syntax and logical er	rors		and the same	
							<u> </u>
4	- o accompo	oc a Diodipili into function		orogen		47	
5	10 use array	, pointer and structure to f	rand synthesize a complete pormulate algorithms and pro	orogram using d	livide and cor	iquer approach.	
5	m ·						
4 5 6 7			numerical and multiplication	problems and se	earching and	Sorting problems	
4 5 6 7		gramming to solve simple			1.	Problems.	
4 5 6 7 8	To apply pro function and	simple integration.		s, namely rot fin	iding of funct	ion differentiati	
4 5 6 7 8 RBT Cla	To apply pro function and assification	simple integration.		, and the	iding of funct	ion, differentiation (of
4 5 6 7 8 RBT Cla	To apply pro function and assification vel Number	Lower Order Thinking	(Levels (LOTS)	, and the	iding of funct	ion, differentiation (of
4 5 6 7 8 RBT Cla	To apply pro function and	Lower Order Thinking		Higher Order L4	iding of funct	ion, differentiation (of

Code Earnel be run & execute

diagrammi cal

1 Care 1	4				ig College, Ludh			
	Department of C	omputer :	Science and Eng	ineering an	d Information	echnology	i it is	
rogram		B.Tech.(ME,ECE,IT)	Semes	ster	1st		
ogram ubject Code		ESC-104		Subje	Subject Title		PPS	
	r Test (MST) No.	10. 2		Cours	Course Coordinator(s)		eep Kaur aur, Kaur Jain o Kaur	
Max. Mark	•	24		Time	Duration	1 hour 30 m	inutes	
Date of MS	She had a second		2, 2022	Roll	Number	y=		
	mpt all questions	70 5	<u> </u>		10.10			
Q. No.		M. Marian	Question			COs, RBT	Marks	
	Dicc di Albah	waan lingge	and binary search	******		CO7, L2	2	
yar	Differentiate bett	Write a proc	and binary search gram to add 2 num	bers using po	ointer	. CO6, L6	2	
Q2 Q3	a) Complete the missing. struct time { int hrs=10; int mts=20; int secs=35;	following	code or correct t	he following	g code if something	ng CO6, CO4	4	
	b) Write a prog	ram in C to	nt from an array? calculate the sum			.CO5, L3	4	
V Q4	4 1 4 44	Write a program to demonstrate the concept of call by reference and call by value along with explanation. Solve the following list of elements using bubble and selection sort.					4	
Q5	Solve the follow	ving list of	elements using but			CO7, L2		
06	Explain the diff	ferent types	of functions with	suitable exam	ples.	CO5, L4	8	
Studen	To translate th	e algorithm	rithm for arithmetics to program(in c l	anguages) t syntax and on and recurs	logical errors	using divide an	d conquer	
1 2 3 4 5 6 7 8	To implemen To decompos approach. To use array, To apply proproblems. To apply prodifferentiation	pointer and gramming t	into function and structure to formuto solve matrix add	synthesize a late algorithmation and mulnerical methoration.	ns and programs tiplication problem od problems, name	s and searching y rot finding of	g and sorting	
3 4 5 6 7 8 RBT Class	To implemen To decompos approach. To use array, To apply proproblems. To apply prodifferentiation	pointer and gramming t	into function and structure to formute o solve matrix additions of the solve simple number of the solv	synthesize a late algorithmation and mulnerical methoration.	ns and programs tiplication problem od problems, name	s and searching y rot finding of	g and sorting	

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			ent of Information T		ater Science		
rogram		B.Tech.(IT, C	SE. ECE)	Semester	1 st		
ubject Code	Took (NACT)	The state of the s	the statement for the testing the statement for the appendix past of the sample association is stated	Subject Title	PPS	leep Kaur Er.Kuljeet Ka	ur
Aid Semester	Test (MS1)	1		Course	Er, Goldend	p Kaur Er.Runjeet Ka p Kaur Er.Ranjodh Kaur	Er Mitali
No.				Coordinator(s)	Er.Navdeep Er.Sidharth	Naur Er Kanjoon Kuur	, Emme
Max. Marks	***************************************	24	The second secon	Time Duration	1 hour 30 r		
Date of MST		Nov 2022	The same of the sa	Roll Number	1 110(11 30 1	muces	
Date of Mot		1NOV 2022		Kon Number			
Note: Attem	pt all questions						
Q. N94	/	The second secon	Question			COs, RBT level	Marks
	What will be t	he output of th	ne following code.	b) Use strcpy a		CO4, L5	2
Tin	nt main() {			function of strip	igs.		
1	$int m[] = \{25, 5\}$	0, 75, 100};					
	m[0] = 33.						
	printf("od", trl	11);					
	return 0;						
6	Miles will be ab-	a autnut?	case 2:	case 6:		CO4, L5	2
K.	What will be the #include <stdio.< td=""><td></td><td>printf("Tuesday");</td><td>printf("Satu</td><td>rday"):</td><td></td><td></td></stdio.<>		printf("Tuesday");	printf("Satu	rday"):		
	int main() {	11-	break;	break;	cay //		
	int day = 4;		case 3:	case 7:			
	switch (day) I		printf("Wednesday"		lay");		
74	case t:		case 4:	break;			
1				V			
	1 Distiller Mot	iday");	printf("Thursday");	}			
	printf("Mor Ineak;	iday");	<pre>printf("Thursday "); case 5:</pre>	} return 0;			
		iday");		return 0;			
	hreak;		case 5: printl("Friday"); break;	· }			
امرا	hreak;	oe the output to	case 5: printl("Friday"); break; evaluate 5 + 5 - 4 / 2 -	- 2 according to preced	lence in C?	1	4
	break; What will t	oe the output to	case 5: printl("Friday"); break; evaluate 5 ± 5 - 4 / 2 - aputer system and discu-	- 2 according to preced ss its each component.	lence in C?	Ç01, L1	4
المارا،	break; by What will L a) Draw a peat b) Draw a flow	e the output to diagram of com	case 5: printl("Friday"); break; evaluate 5 ± 5 - 4 / 2 - aputer system and discu- aggreatest among 3 num	} - 2 according to preced ss its each component. abers.		ÇO1, L1	
المرا.	break; y What will to a) Draw a peat b) Draw a flow List the types	e the output to diagram of con chart for findir	case 5: printl("Friday"); break; evaluate 5 + 5 - 4 / 2 - rputer system and discu- ing greatest among 3 num tem and discuss the fun	- 2 according to preced as its each component. others. ctions of an operating s		CO1, L1	4 4 4
المرا.	break;) What will to a) Draw a neat b) Draw a flow List the types a Write a co	e the output to diagram of con chart for findir	case 5: printl("Friday"); break; evaluate 5 ± 5 - 4 / 2 - aputer system and discu- aggreatest among 3 num	- 2 according to preced as its each component, others. ctions of an operating so any int main() (ÇO1, L1	-1
الم الم	break; y What will to a) Draw a peat b) Draw a flow List the types	e the output to diagram of con chart for findir	case 5: printl("Friday"); break; evaluate 5 + 5 - 4 / 2 - rputer system and discu- ing greatest among 3 num tem and discuss the fun	- 2 according to preced as its each component. others. ctions of an operating s		CO1, L1	-1
الم الم	break;) What will to a) Draw a neat b) Draw a flow List the types a Write a co	e the output to diagram of con chart for findir	case 5: printl("Friday"); break; evaluate 5 + 5 - 4 / 2 - rputer system and discu- ing greatest among 3 num tem and discuss the fun	- 2 according to preced ss its each component. abers. ctions of an operating signary int main() { int i = 0;	vstem.	CO1, L1	4
05	break;) What will to a) Draw a neat b) Draw a flow List the types a Write a co	e the output to diagram of con chart for findir	case 5: printl("Friday"); break; evaluate 5 + 5 - 4 / 2 - rputer system and discu- ing greatest among 3 num tem and discuss the fun	- 2 according to preced ss its each component. obers. ctions of an operating st ig any hat main() { int i = 0; do {	vstem.	CO1, L1	-1
05	break; y What will to a) Draw a reat b) Draw a flow List the types of a) Write a colloop. **** *** ***	be the output to diagram of con s chart for findir of operating syst de to print the	case 5: printl("Friday"); break; evaluate 5 ± 5 - 4 / 2 - sputer system and discu- ag greatest among 3 num tem and discuss the fun following pattern usin	- 2 according to preced ss its each component. obers. ctions of an operating st ig any ant main() { int i = 0; do { printf("%d\n i++; '	vstem.	CO1, L1	-1
05	break; y What will to a) Draw a reat b) Draw a flow List the types of a) Write a colloop. **** *** ***	be the output to diagram of con s chart for findir of operating syst de to print the	case 5: printl("Friday"); break; evaluate 5 + 5 - 4 / 2 - rputer system and discu- ing greatest among 3 num tem and discuss the fun	- 2 according to precedes its each component. abers. ctions of an operating sylint i = 0; do { printf("%d\n' i++; ', } give its while (i < 5);	vstem.	CO1, L1	4
05	break; y What will to a) Draw a peat b) Draw a flow List the types a loop. **** ** b) Convert toutput,	be the output to diagram of con schart for findir of operating sys- de to print the he following co	case 5: printl("Friday"); break; evaluate 5 ± 5 - 4 / 2 - sputer system and discu- ag greatest among 3 num tem and discuss the fun following pattern usin	- 2 according to preced ss its each component. obers. ctions of an operating st ig any ant main() { int i = 0; do { printf("%d\n i++; '	vstem.	CO1, L1	-1
0	break; y What will to a) Draw a reat b) Draw a flow List the types a) Write a coloop. **** ** b) Convert to output, #include <std< td=""><td>be the output to diagram of con schart for findir of operating syst de to print the he following co</td><td>case 5: printl("Friday"); break; evaluate 5 ± 5 - 4/2- exputer system and discu- ing greatest among 3 num tem and discuss the fun following pattern using</td><td>- 2 according to precedes its each component. abers. ctions of an operating sylint i = 0; do { printf("%d\n' i++; ', } give its while (i < 5);</td><td>vstem.</td><td>CO1, L2 CO4, L6</td><td>4 4</td></std<>	be the output to diagram of con schart for findir of operating syst de to print the he following co	case 5: printl("Friday"); break; evaluate 5 ± 5 - 4/2- exputer system and discu- ing greatest among 3 num tem and discuss the fun following pattern using	- 2 according to precedes its each component. abers. ctions of an operating sylint i = 0; do { printf("%d\n' i++; ', } give its while (i < 5);	vstem.	CO1, L2 CO4, L6	4 4
· 105	break; y What will to a) Draw a reat b) Draw a flow List the types a) Write a coloop. **** b) Convert toutput, #include <std< td=""><td>be the output to diagram of con a chart for findir of operating syst de to print the he following co</td><td>case 5: printl("Friday"); break; evaluate 5 ± 5 - 4/2 - nputer system and discu- ng greatest among 3 nun- tem and discuss the fun- following pattern using ode into for-loop and greatest among and greatest among a nun-</td><td>- 2 according to precedes its each component. abors. ctions of an operating so g any int main() { int i = 0; do { printf("%d\n i++;) } give its while (i < 5); return 0; }</td><td>vstem.</td><td>CO1, L1</td><td>4</td></std<>	be the output to diagram of con a chart for findir of operating syst de to print the he following co	case 5: printl("Friday"); break; evaluate 5 ± 5 - 4/2 - nputer system and discu- ng greatest among 3 nun- tem and discuss the fun- following pattern using ode into for-loop and greatest among and greatest among a nun-	- 2 according to precedes its each component. abors. ctions of an operating so g any int main() { int i = 0; do { printf("%d\n i++;) } give its while (i < 5); return 0; }	vstem.	CO1, L1	4
(7)5	break; "y What will to a) Draw a reat b) Draw a flow List the types a flow List the types a) Write a colloop. **** ** ** ** ** ** ** ** **	the output to diagram of come chart for finding of operating system to print the distribution of the following companies.	case 5: printl("Friday"); break; evaluate 5 ± 5 - 4 / 2 - sputer system and discu- ing greatest among 3 mun tem and discuss the fun following pattern usin ode into for-loop and g with example. Compiling a C Program	- 2 according to precedes its each component. abors. ctions of an operating so g any int main() { int i = 0; do { printf("%d\n i++;) } give its while (i < 5); return 0; }	vstem.	CO1, L2 CO4, L6	4 4
(O)5-	break; 'j What will I 'a) Draw a peat b) Draw a flow List the types a) Write a co- loop. **** ** b) Convert toutput, #include <sid (co)<="" a)="" b)="" coutcomes="" discuss="" td="" the="" write=""><td>the output to diagram of come chart for finding of operating system to print the distribution of the following companies of errors four Stages of Control of the system of the stages of the cours will be diagram of the system o</td><td>case 5: printl("Friday"); break; evaluate 5 + 5 - 4/2 - rputer system and discurage greatest among 3 munitem and discuss the functional following pattern using the following pattern using the function of the following pattern using the function of the function o</td><td>- 2 according to precedes its each component. abers. ctions of an operating sylog any int main() { int i = 0; do { printf("%d\n' i++; ') } give its while (i < 5); return 0; } o object and executable</td><td>vstem.</td><td>CO1, L2 CO4, L6</td><td>4 4</td></sid>	the output to diagram of come chart for finding of operating system to print the distribution of the following companies of errors four Stages of Control of the system of the stages of the cours will be diagram of the system o	case 5: printl("Friday"); break; evaluate 5 + 5 - 4/2 - rputer system and discurage greatest among 3 munitem and discuss the functional following pattern using the following pattern using the function of the following pattern using the function of the function o	- 2 according to precedes its each component. abers. ctions of an operating sylog any int main() { int i = 0; do { printf("%d\n' i++; ') } give its while (i < 5); return 0; } o object and executable	vstem.	CO1, L2 CO4, L6	4 4
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(O)5-	break; 'j What will I 'a) Draw a peat b) Draw a flow List the types a) Write a co loop. **** ** b) Convert t output, #include <std (co)="" b)="" c="" discuss="" formulate="" i<="" j)="" outcomes="" td="" the="" to="" translate="" write=""><td>the output to diagram of come chart for finding of operating system of the following comparison of the following c</td><td>case 5: printl("Friday"); break; evaluate 5 + 5 - 4 / 2 - router system and discurage greatest among 3 mun tem and discuss the fun following pattern usin ode into for-loop and greatest among a compiling a C Program (able to for arithmetic and logical program(in c languages)</td><td>- 2 according to precedes its each component. abers. ctions of an operating sying any last main() { int i = 0; do { printf("%d\n i++; ',') } give its while (i < 5); return 0; } o object and executable</td><td>vstem.</td><td>CO1, L2 CO4, L6</td><td>4 4</td></std>	the output to diagram of come chart for finding of operating system of the following comparison of the following c	case 5: printl("Friday"); break; evaluate 5 + 5 - 4 / 2 - router system and discurage greatest among 3 mun tem and discuss the fun following pattern usin ode into for-loop and greatest among a compiling a C Program (able to for arithmetic and logical program(in c languages)	- 2 according to precedes its each component. abers. ctions of an operating sying any last main() { int i = 0; do { printf("%d\n i++; ',') } give its while (i < 5); return 0; } o object and executable	vstem.	CO1, L2 CO4, L6	4 4
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printed pages within first ten minutes.

of Is it possible to declare more than one array in the same declaration

statement? Justify your answer.

Please check that this question paper contains Q questions and &

By analysing the following program, determine the output? and explain your [Total No. of Questions: 09] [Total No. of Pages: 3] Uni. Roll No. Program: B.Tech. (Batch 2018 onward) Semester:18/2nd #include <stdio.h> Name of Subject: Programming for Problem Solving int main() (Subject Code: ESC-104 int i; Paper ID: 15935 for(i=0;i<5;i++) Scientific calculator is Not Allowed {int j=3; Time Allowed: 03 Hours Max. Marks: 60 printf("%d",i*j); NOTE: printf("%d",j); 1) Parts A and B are compulsory 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice return 0; 3) Any missing data may be assumed appropriately [Marks: 02 each] [Marks: 04 each] Part - A Part - B Demonstrate the concept of break and continue statement with a suitable example. Q1. (a) Define an algorithm and list the various desirable characteristics of a good Define a function. List the various advantages of using functions. List and explain various string functions by making use of suitable examples. When the if statement does not have an associated else, explain what happens What is a pointer? How a pointer is declared. Explain with an example, how a when the condition evaluates to zero with a suitable example. variable is accessed using a pointer. Write and explain the output of the following program with steps. Define flowchart. Construct a flowchart and write an algorithm to find the largest digit in a natural number 'n'. #include≤stdio.h>_ int f(int n, int k) Distinguish between searching and sorting. Explain binary search by taking a suitable else if(n\(2\) return f(n/2, 2\(k\) +k; else return f(n/2, 2\(k\) -k; example to demonstrate its concept. Q7. Develop a program that accepts an array, interchanges the first element with the last element, the second element with the second last element, and so on, and finally prints the new array. int main() printf("%d",f(20,1)); return 0; d) The elements of an array are given as 12,7,13,9,10,77,2,8. Identify and write the arrangement of elements after the first pass of the bubble sort method. Page 2 of 3 P.T.O. Page 1 of 3

(0/2)+

[Marks: 12 each]

Construct a program to make the following pattern using for and while loop and the output of your program must exactly match the pattern given below. Note: make two different programs for this one using FOR loop and another using WHILE loop.

*
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Point.

OR

Write an algorithm for Insertion and linear scarch. Also, explain both using a suitable example.

Explain the need of recursion in C.What do you mean by base case in recursion, explain by taking a suitable example. Further, write a program in C to print the factorial of a number 'n'.

OR

Define a structure. Explain the main reason for using structures. Design a structure named student to store the data about a student which contains the following elements- rollno, name and score. Write a program to input the data about students, and output the stored data.

Page 3 of 3

Please check that this question paper contains 9 questions and 3 printed pages within first ten minutes. [Total No. of Questions: 09] [Total No. of Pages: ..3.] Uni. Roll No. Program: B.Tech. (Batch 2018 onward) Semester: 2 Name of Subject: Programming for Problem Solving Subject Code: ESC-104 Paper ID: 15935 Time Allowed: 03 Hours Max. Marks: 60 NOTE: 1) Parts A and B are compulsory 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice 3) Any-missing data may be assumed appropriately Part - A [Marks: 02 each] QI. a) Describe Operating System. List the various functions of the operating b) Discuss Syntax and logical errors. Explain the use of scanf statement. d) How to initialize a structure. Give an example. e) Analyze the program given below and write and explain the output. # include <stdio.h> void fun(int x) x = 30;int main() int y = 20; fun(y); printf("%d", y); return 0;

Page 1 of 3

P.T.O.

f) Determine the output of the following program? and explain your answer.

include <stdio.h>
void fun(int *ptr) {
 *ptr = 30;
}
int main() {
 int y = 20;
 fun(&y);
 printf("%d", y);
 return 0;
}

Part - B [Marks: 04 each]

Define flowchart. Construct a flowchart and write an algorithm to compute the volume of a sphere. Use the formula: $V = (4/3) \cdot pi \cdot r3$ where pi is equal to 3.1416 approximately. The r is the radius of the sphere. Display the result.

Define structure and explain the concept of array of structures in detail.

Define pointers? Demonstrate the working of a pointer with the help of a suitable

example.

What are functions? List types of user defined functions with suitable examples.

Explain various conditional branching statements in detail.

D2. Distinguish between searching and sorting. Explain any sorting algorithm by taking a

Distinguish between searching and sorting. Explain any sorting algorithm by taking suitable example.

Part - C [Marks: 12 each]

Illustrate the need of recursion in C. Write a program in C to print the first 50 natural numbers using recursion.

OR

Write an algorithm for Selection sort and explain taking a suitable example.

9 Define an array. Differentiate between 1-D and 2-D arrays. Create a Program to find the second largest & smallest elements in an array.

OR

Page 2 of 3

Differentiate between while and do while loop, also write the syntax for 'FOR' loop. Create a program to make a pyramid pattern using numbers and the Output of your program must exactly match the below given.

Please check that this question paper contains 9 questions and 3 printed pages within first ten minutes.

Uni. Roll No. ... 2 13571.

[Total No. of Pages: 3]

Program: B.Tech. (Batch 2018 onward) Semester: 1^{\$1}/2ND Name of Subject: Programming for Problem Solving Subject Code: ESC-104 Paper ID: 15935 Scientific calculator is Not Allowed

Time Allowed: 03 Hours

Max. Marks: 60

NOTE:

- 1) Parts A and B are compulsory
- 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
- 3) Any missing data may be assumed appropriately. For programs, it is expected that suitable assumptions are made and stated wherever micro-level requirement related to the code to be developed is not mentioned.

Part - A

[Marks: 02 each]

Differentiate between algorithm and pseudocode

- b) Justify quoted text with example, "A pointer stores the memory address of a variable".
- c) How many passes does a Bubble sort algorithm require for sorting a given list of 'n' items? Give example.
- d) Differentiate between semantic and logical errors.
- e) Is it possible to declare more than one array in the same declaration statement? Justify

P.T.O.

f) What will be the output of following code?

```
int main ()
int ij;
for(i=2;i<=4;i++)
  for(j=2;j<=4;j++)
     if(++i ==3 || --j==3)
        continue;
     printf(" %d",i);
     printf(" %d"j);
     if(++i==5 || --j=
printf(" %d".i);
printf(" %d",j);
return 0;
```

Part - B

[Marks: 04 cach]

2 With the help of block-diagram, explain components of computer system. Q3. Frite steps for conversion of source code to executable code with the help of a diagram. Explain recursion with the help of an example.

- Q5 Create a user-defined function to find the sum of digits of any positive integer number read through the keyboard. Make use of parameter passing and return type concepts.
- Q6 Construct a flowchart and write an algorithm to find how many times the digit 'D' appears in the number 'N'.
- QI Develop a code that accepts an array, interchanges the first element with the last element. the second element with the second last element, and so on, and finally prints the new array. Prices To care

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[Marks: 12 each]

Q8 Explain selection and insertion sort algorithms. Also implement the same.

OR

Write a program to multiply two 2-D arrays.

Q9 Develop a menu driven code that does the following:

If 'A' is entered, user-defined function 'isPalindrome' must be able find whether number entered by user is palindrome or not.

If 'B' is entered, user-defined function 'add' must be able to add positive two numbers which are read through the keyboard.

If any other 'character' is entered, code must be able to terminate with a suitable message.

[Make use of parameter passing and return type concepts while developing code.]

OR

Create a structure 'Student' that contains the fields like: studentID, name, age, and marks. Write a program that allows the user to perform the following tasks:

Input student details (ID, name, age, marks) for 'n' students (where 'n' is read through the keyboard).

Display the details of all students in the record.

Find and display details of student who has highest marks.

In your program, make use of an array of structures and functions.

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