



Laxmi Charitable Trust's
**Sheth L.U.J. & Sir M.V. College of
Arts, Science & Commerce**

Dr. S Radhakrishnan Marg, Andheri (E), Mumbai - 400 069.

Certificate

This is to certify that, Mr./Ms. NEERAJ APPARI
Seat No. F129 studying in F.Y.B.Sc. SEM-II Computer
Science has satisfactorily completed the Practicals in the
Subject of PROGRAMMING C as prescribed by University of
Mumbai, during academic year 2019-2020.

Signature

Subject in charge

Date: - 03/02/2020

Signature

Co-ordinator B.Sc. C.S

Date: -

Signature

External Examiner

Date: -



**SHETH L.U.J. COLLEGE OF ARTS &
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Department of Computer Science

ALNDAK

Date	Topic	Sign
7/01/2020	Write a C program to print "Hello World"	✓
7/01/2020	Write a C program add two numbers	✓
7/01/2020	Write a C program to find area of Circle	✓
7/01/2020	Write a C program to find circumference of Circle	✓
7/01/2020	Write a C program to find Simple Interest	✓
7/01/2020	Write a C program to find area of rectangle	✓
7/01/2020	Write a C program to swap two numbers	✓
7/01/2020	Write a C program to swap two numbers without using temporary variable	✓
13/01/2020	Write a C program to demonstrate arithmetic operator	✓
13/01/2020	Write a C program to demonstrate increment and decrement	✓
13/01/2020	Write a C program to demonstrate assignment operator	✓
13/01/2020	Write a C program to demonstrate relational operator	✓
13/01/2020	Write a C program to demonstrate logical operator	✓
13/01/2020	Write a C program to demonstrate bitwise operator	✓



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ALNRAO

Date	Topic	Sign
13/01/2020	Write a C program to demonstrate size of operator	BR
21/01/2020	Write a C program to demonstrate ternary operator	?
21/01/2020	Write a C program to check whether the integer entered by user is odd or even	?
21/01/2020	Write a C program to find maximum of two numbers	?
21/01/2020	Write a C program to find maximum of three numbers	?
21/01/2020	Write a C program to check positive, negative or zero	?
21/01/2020	Write a C program to check whether number is divisible by 5 and 11 or not	?
22 21/01/2020	Write a C program to check whether character is alphabet, digit or special character	?
23 21/01/2020	Write a C program to check uppercase or lowercase character	?
24 21/01/2020	Write a C program to check uppercase or lowercase character using library function	?
25 21/01/2020	Write a C program to check vowel or consonant.	?
26 23/01/2020	Calculate the percentage of 8 subjects of student	?
27 23/01/2020	Write a C program to print Hello World 10 times using for loop	?
28 23/01/2020	Write a C program to print numbers from 1 to 10 using for loop	?



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ALNRAo

Date	Topic	Sign
23/01/2020	Write a C program to print squares of numbers from 1 to 10 using for loop	?
23/01/2020	Write a C program to calculate sum of first n natural numbers using for loop	?
23/01/2020	Write a C program to generate multiplication of table upto to 10 using for loop	?
23/01/2020	Write a C program to find factorial of the number using for loop	?
23/01/2020	Write a C program to print half pyramid using * using for loop	?
23/01/2020	Write a C program to print half pyramid using numbers using for loop	?
23/01/2020	Write a C program to find leap year, century year and centuary year perfectly divisible by 4	?
23/01/2020	Write a C program to find G.C.D of two numbers using for loop	100P
23/01/2020	Write a C program to print pyramid using * using for loop	100P
23/01/2020	Write a C program to find fibonacci series upto n terms using for loop	?
28/01/2020	Write a C program to print Hello World 10 times using while loop	?
28/01/2020	Write a C program to print numbers from 1 to 10 using while loop	?
28/01/2020	Write a C program to print squares of numbers from 1 to 10 using while	?



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A.I.N.D.A.O

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Date	Topic	Sign
28/01/2020	Write a C program to calculate sum of n natural numbers using while loop	✓
28/01/2020	Write a C program to generate multiplication table upto to 10 using while loop	✓
28/01/2020	Write a C program to find factorial of the number using while loop	✓
28/01/2020	Write a C program to print half pyramid using * using while loop	✓
28/01/2020	Write a C program to print half pyramid using numbers using while loop	✓
28/01/2020	Write a C program to print Hello World using do while loop	✓
28/01/2020	Write a C program to print integers from 1 to 10 using do while loop	✓
28/01/2020	Write a C program to print square of 1 to 10 using do while loop	✓
28/01/2020	Write a C program to calculate sum of first n natural numbers using do while loop	✓
28/01/2020	Write a C program to generate multiplication table 1 to 10 using do while loop	✓
30/01/2020	Write a C program to print half pyramid of stars using while loop	✓
30/01/2020	Write a C program to print half pyramid using white loop using # numbers	✓
30/01/2020	Write a C program to print fibonacci series upto n terms using while loop	✓
30/01/2020	Write a C program to print half pyramid using numbers with do while loop	✓



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DLNRAD

No	Date	Topic	Sign
56	30/01/2020	Write a C program to print half pyramid using * with do while loop	✓
57	30/01/2020	Write a C program to find factorial using do while loop	✓
58	30/01/2020	Written a C program to find G.C.D using do while loop	
59	30/01/2020	Written a C program to print pyramid of + using do while loop	
60	30/01/2020	Write a C program to print Fibonacci series using do while loop	
61	30/01/2020	Write a C program to find prime number using break statement	
62	30/01/2020	Write a C program to find Fibonacci series upto n terms using continue	
63	30/01/2020	Write a menu driven C program which has following options a) Factorial of number b) Prime number checker c) Odd or even number checker d) Exit	✓
64	13/02/2020	Write a C program to print square using prototype declaration	
65	13/02/2020	Write a C program to Swap two numbers using call by values	
66	13/02/2020	Write a C program to swap two numbers using call by reference	
67	13/02/2020	Write a C program to find factorial of a number using recursive function	



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ALNIRAO

Date	Topic	Sign
17/02/2020	Write a C program to find average marks obtained by a class of 30 students in test	?
17/02/2020	Write a C program to store elements entered by user using two dimensional array	PR
17/02/2020	Write a C program to add two matrices using multidimensional array	?
03/03/2020	Write a C program to demonstrate string function	PR
03/03/2020	Write a C program to store data of 10 block using Structure	PR



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ALNRAO

Practical - 1

Aim: Write a C program to print "Hello World".

```
#include <stdio.h>
void main()
```

```
{ clrscr();
    printf("Hello, World!");
    getch(); }
```

00

Output:

RECEIVED

signal

Hello, World:

ALREADY



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AL NIBOO

Practical 2

Aim - Write a C program to add two numbers

```
#include <stdio.h>
void main ()
{
    int a, b;
    clrscr();
    printf ("Enter first number : ");
    scanf ("%d", &a);
    printf ("Enter second number : ");
    scanf ("%d", &b);
```

$c = a + b$
printf ("Addition is : %d", c);

getch();
}

~~#include <stdio.h>~~
~~void main ()~~
~~{ int a, b, c;~~
~~a = 3; clrscr();~~
~~b = 3;~~
~~c = a + b;~~
~~printf ("Addition is : %d", c);~~
~~getch();~~
}

(P)

Output -

ALNIRAK

Enter first number = 12

Enter Second number = 5

Addition is : 17

Addition is : 6

1) Algorithm:

- 1) Take first number
- 2) Take second number assigned to a
- 3) Addition of a+b assigned to b
- 4) Value of addition is assigned to c
- 5) Value of addition is obtained.



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Practical 3

Ques: Write a C program to find area of circle

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
float p,r,a;  
clrscr();
```

```
p = 3.14;
```

```
printf("Enter radius:");  
scanf("%d", &r);
```

```
a = p * r * r;
```

```
printf("Area of the circle %f", a);
```

```
getch();
```

```
}
```

~~```
#include <stdio.h>
```~~~~```
void main()
```~~~~```
{
```~~~~```
float p,r,a)
```~~~~```
clrscr();
```~~~~```
p = 3.14;
```~~~~```
r = 2;
```~~~~```
a = p * r * r;
```~~~~```
printf("Area of circle: %f", a);
```~~~~```
getch();
```~~~~```
}
```~~

Output:

Enter radius: 4

Area of circle: 50.24

Area of circle: 50.24

Algorithm:

- 1) Value of  $\pi$  is taken as 3.14159
- 2) value of radius is assigned to r
- 3) Area of circle is  $\pi r^2$
- 4) Value of Area of circle is assigned to a
- 5) Area of circle is obtained



## Practical 4

Aim: Write a C program to find the circumference of circle

```
#include<stdio.h>
```

```
Void main()
```

```
{
```

```
 float p,c,r;
```

```
 clrscr();
```

```
p=3.14;
```

```
print f ("Enter radius :");
```

```
scanf ("%f",&r);
```

```
c=2*p*r;
```

```
print f ("Circumference of circle : %f",c);
```

```
getch();
```

```
#include <stdio.h>
```

```
Void main()
```

```
{ float p,c,r;
```

```
 clrscr();
```

```
 p=3.14;
```

```
 r=2;
```

```
 c=2*p*r;
```

```
 print f ("Circumference of circle : %f",c);
```

```
 getch();
```

By

Output:

Enter radius: 2

Circumference of circle: 12.56

Circumference of circle: 12.56

Algorithm

- 1 Start
- 2 Value of  $\pi$  is 3.14
- 3 Value of radius is assigned to  $r$
- 4 Circumference of circle is  $2 * \pi * r$
- 5 Value of Circumference of circle is assigned to  $c$
- 6 Thus the value of circumference of circle is obtained



## Practical 5

Aim: Write a C program to <sup>find</sup> write simple interest

```
#include <stdio.h>
void main()
```

```
{ float si, p, n, r;
clrscr();
```

```
printf("Enter principle amount:");
scanf("%f", &p);
```

```
printf("Enter number of months:");
scanf("%f", &n);
```

```
printf("Enter rate of interest:");
scanf("%f", &r); } }
```

$$si = p * n * r / 100$$

```
printf("Simple interest : %f", si);
```

```
getch(); }
```

```
#include <stdio.h>
```

```
void main()
```

```
{ p = 10000
```

```
 n = 12
```

```
 r = 10 }
```

$$si = p * n * r / 100$$

```
printf("Simple interest : %f", si);
```

```
getch(); }
```

(P)



## Output

Enter principle amount: 10000

Enter number of months: 12

Enter rate of interest: 10

Simple Interest: 12,000

Simple Interest

Simple Interest: 12,000

## Algorithm

Start

Value of principle amount is assigned to p

Value of number of months is assigned to n

Value of rate of interest is assigned to r

Simple interest =  $p * n * r / 100$

Value of simple interest is assigned to si

Thus the value of simple interest is obtained



## Practical 6

Aim: Write a C program to find area of rectangle

```
#include <stdio.h>
```

```
void main ()
```

```
{
 float a,b,l;
 clrscr();
```

```
print f ("Please Enter length of rectangle :");
scanf ("%f", &L);
```

```
print ("Enter breadth of rectangle:");
scanf ("%f", &b);
```

$$a = \lambda^* b;$$

```
a=3.6
print f("Area of rectangle : %f",a);
```

getch();

#include <stdio.h>

```
void main()
```

{ float a, b, l;

```
clrscr();
```

$$b = 2$$

$$l = 2$$

$$a = l^4 \delta$$

Print f("Area of rectangle: "left", right);

Algo RAO

Output :

```
Algorithm
Enter length of rectangle : 8
Enter breadth of rectangle : 6
Area of rectangle : 48
Area of rectangle : 2
```

Algorithm

Start C

- 1> Value of length of rectangle is assigned to l
- 2> Value of breadth of rectangle is assigned to b
- 3> Area of rectangle =  $l * b$
- 4> Value of area of rectangle is assigned to a
- 5> Thus area of rectangle is obtained

Practical 7

Write a C program to swap two numbers

```
#include<stdio.h>
void main()
```

```
int a,b,c;
clrscr();
```

```
printf("Before Swap\n");
printf("Enter a:");
scanf("%d",&a);
```

```
printf("Enter b:");
scanf("%d",&b);
```

```
c=a;
a=b;
b=c;
```

```
printf("After Swap\n");
printf("a=%d\n",a);
printf("b=%d\n",b);
getch();
```

3.

```
#include<stdio.h>
void main()
```

{

```
int a,b,c;
clrscr();
```

```
printf("Before Swap\n");
```

```
a=35; c=a;
```

```
b=6; a=b;
```

```
b=c;
```

```
printf("After Swap\n");
```

```
printf("a=%d\n",a);
```

```
printf("b=%d\n",b);
```

```
getch();
```

}

R

Output

|                                           |                               |
|-------------------------------------------|-------------------------------|
| Before Swap<br>Enter a : 5<br>Enter b : 6 | Before Swap<br>a : 5<br>b : 6 |
| After Swap<br>a : 6<br>b : 5              | After Swap<br>a : 6<br>b : 5  |

Algorithm  
Start C

- 1) Value of first number to be swapped is assigned to a
- 2) Value of second number to be swapped is assigned to b
- 3) Steps for swapping
  - C := a
  - a := b
  - b := C
- 4) Thus the value of second number that is swapped is assigned to a
- 5) Thus the value of first number that is swapped is assigned to b



### Practical 8

Temporary

Aim: Write a C program to swap two numbers without 3 variable

```
#include <stdio.h>
```

```
void main()
```

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
int a,b;
```

```
clrscr();
```

```
printf("Enter two numbers:");
```

```
scanf("%d%d", &a, &b);
```

```
int a, b;
```

```
clrscr();
```

```
a= printf("Before S
```

```
printf("Before Swap");
```

```
printf("%d %d", a, b);
```

```
a = 2
```

```
b = 1
```

```
printf("%d %d", a,
```

```
a = a - b;
```

```
b = a + b;
```

```
a = b - a;
```

```
a = a - b;
```

```
b = a + b;
```

```
a = b - a;
```

```
printf("%d", a After Swap);
```

~~printf("%d", a);~~~~printf("%d", b);~~~~getch();~~~~printf("After Swap~~~~printf("%d", a);~~~~printf("%d", b);~~~~getch();~~

```
}
```

Output:

Alvin

Enter two numbers: 2  
1

Before Swap  
21

After Swap  
12

Before Swap

21

After Swap  
12

Algorithm

Start

The two numbers together that has to be swapped is assigned to a and b

Value of number of before swapped is

Steps for swapping

a - b

a + b

b - a

- After swaping the value of number is printed together ( $a+b-a$ )  
Thus the two numbers got swapped



## Practical - 9

Aim: Write a C program to demonstrate arithmetic operators

```
#include <stdio.h>
void main()
{ int a,b,c,d,e,f,g;
clrscr();
```

```
printf("Enter first number\n");
scanf("%d", a);
printf("Enter second number\n");
scanf("%d", b);
```

```
c=a+b
printf("Addition is \n", c);
```

```
d=a-b
printf("Subtraction is \n", d);
```

```
e=a*b
printf("Multiplication is \n", e);
```

```
f=a/b
printf("Division is \n", f);
```

```
g=a%b
printf("Remainder is : ", g);
getch();
```

ALNIRAO

## Output

Enter first number : 10

Enter second number : 5

Addition is : 15

Subtraction is : 5

Multiplication is : 50

Division is : 2

Remainder is 0

## Algorithm

- 1 Start C
- 2 take int with variables a,b,c,d,e,f,g
- 3 Assign first number to a
- 4 Assign second number to b
- 5 Addition of a and b is assigned to d
- 6 Subtraction of a and b is assigned to e
- 7 Multiplication of a and b is assigned to f
- 8 Division of a and b is assigned to g
- 9 Remainder of a and b is assigned to g



## Practical 10

Aim - Write a C program to demonstrate increment and decrement

```
#include<stdio.h>
void main()
{
 int a,b;
 clrscr();
 printf("Enter the value to be incremented:");
 scanf("%d",&a);
 printf("Enter the value to be decremented:");
 scanf("%d",&b);
 printf("Increment : %d \n Decrement : %d", ++a, --b);
```

getch()

Q/M

ALNIRAO

Output

Enter the value to be incremented: 6

Enter the value to be decremented: 10

Increment: 7

Decrement: 9

Algorithm  
part C

Take a and b as int

Assign the value to be incremented to a

Assign the value to be decremented to b

Print the increment and decrement values



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Practical 11

Aim - Write a C program to demonstrate assignment operator

```
#include <stdio.h>
void main()
{
 int a,b,c,d;
 clrscr();
 printf("Enter the value of a:");
 scanf("%d",&a);
 a += a;
 printf("%d\n",a); /* To print \n, a);

 printf("Enter the value of b:");
 scanf("%d",&b);
 b *= b;
 printf("%d\n",b);

 printf("Enter the value of c:");
 scanf("%d",&c);
 c *= c;
 printf("%d\n",c);

 printf("Enter the value of d:");
 scanf("%d",&d);
 d /= d;
 printf("%d",d);
 getch();
}
```

ALGORITHM

Output

Enter the value of a: 2

4

Enter the value of b: 4

0

Enter the value of c: 5

25

Enter the value of d: 7

0

Algorithm

Start

- 1] take a,b,c,d as int values
- 2] Value of a is assigned to a and the value of  $a+a$  is also assigned to a
- 3] Value of b and value of  $b-b$  is assigned to b
- 4] Value of c and value of  $c*c$  is assigned to c
- 5] Value of d and value of  $d \% d$  is assigned to d
- 6] a,b,c and d is printed



## Practical 12

Aim - Write a C program to implement demonstrate relational operators

```
#include<stdio.h>
void main()
{
 int a,b;
```

```
 clrscr();
 printf("Enter the value of first number:");
 scanf("%d",&a);
 printf("Enter the value of second number:");
 scanf("%d",&b);
```

```
 printf("\n%d = %d",a,b,a==b);
 printf("\n%d > %d",a,b,a>b);
 printf("\n%d < %d",a,b,a<b);
 printf("\n%d != %d",a,b,a!=b);
 printf("\n%d ≥ %d",a,b,a≥b);
 printf("\n%d ≤ %d",a,b,a≤b);
```

getch();

## Output

Enter the value of first number = 5  
 Enter the value of second number = 6

$a == b = 0$

$a > b = 0$

$a < b = 1$

$a \leq b = 1$

$a \geq b = 0$

$a != b = 1$

## Algorithm

## Story

- 1 Take a and b is int
- 2 Value of a is assigned to a
- 3 Value of b is assigned to b
- 4 Value of  $a == b$  is printed
- 5 Value of  $a > b$  is printed
- 6 Value of  $a < b$  is printed
- 7 Value of  $a \leq b$  is printed
- 8 Value of  $a \geq b$  is printed
- 9 Value of  $a != b$  is printed



### Practical 13

Aim - Write a C program to demonstrate logical operator

#include <stdio.h>

void main()

{ int a,b,c,d,e,f,g;

scanf("%d", &a);  
printf("Enter the value of a : ");

scanf("%d", &b);  
printf("Enter the value of b : ");

scanf("%d", &c);  
printf("Enter the value of c : ");

d = (a == b) && (c > b);

printf("(a == b) && (c > b) is %d \n", d);

e = (c == a) && (b < a);

printf("(c == a) && (b < a) is %d \n", e);

f = (a != c) || (b == c);

printf("(a != c) || (b == c) is %d \n", f);

g = !(a == b);

printf("!(a == b) is %d \n", g);

getch();

## Output

Enter the value of a: 9

Enter the value of b: 8

Enter the value of c: 6

$(a == b) \& \& (c > b)$  is 0

$(c == a) \& \& (b < a)$  is 0

$(a != c) \& \& (b == c)$  is 1

$\therefore !(a == b) = 1$

## Algorithm

Start

- 1 Take a,b,c,d,e,f and g as int
- 2 Assign the value of a to a
- 3 Assign the value of b to b
- 4 Assign the value of c to c
- 5 Assign the value of  $(a == b) \& \& (c > b)$  to d
- 6 Assign the value of  $((c == a) \& \& (b < a))$  to e
- 7 Assign the value of  $(a != c) \& \& (b == c)$  to f
- 8 Assign the value of  $!(a == b)$  to g
- 9 d,e,f and g is printed



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Practical 134

Aim - Write a C program to demonstrate bitwise operator

#include <stdio.h>

Void main()

{

int a,b,i;  
clrscr();  
printf("Enter the value of first number:");  
scanf("%d",&a);  
printf("Enter the value of second number:");  
scanf("%d,&b);

printf("Value of Bitwise %od & %od = %od\n",a,b,a&b);

printf(" %od | %od \n",a,b,a|b);

printf(" %od ^ %od \n",a,b,a^b);

printf(" ~%od = %od\n",~a);

printf(" ~%od = %od\n",~b);

for (i=0;i<2,++i)

printf(" Right shift of by %od: %od\n",i,a>>i);

for (i=0;i<2,++i)

printf(" Left shift by %od : %od\n",i,a<<i);

getch();

bcc

ALNIRAO

Output

Enter the value of first number : 5

Enter the value of second number : 6

~~a & b at margin~~  
5 & 6 : 4

5 | 6 : 7

5 ^ 6 : 3

~ a = -5

~ b = -6

Right shift by 3 : 10  
left shift by 0 : 3

Algorithm

Start C

1) Take a, i and b as input  
2) Assign the value of first number to a  
3) Assign the value of second number to b  
4) Print the value of a & b

5) Print the value of a | b

6) Print the value of a ^ b

7) Print the value of ~a and ~b

8) Take for loop and assign right shift by  
(i=0, i<=2, ++i) and a>i

9) Take for loop and assign left shift by  
(i=0, i<=2, ++i) and b<i



Aim -

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BU/190

Practical - 15

Aim: Write a python program to demonstrate  
size of operator.

```
#include <stdio.h>
void main()
```

```
int a;
float b;
char c;
double d;
```

```
clrscr();
printf("Size of int = %d bytes\n", sizeof(a));
```

```
printf("Size of float = %d bytes \n", sizeof(b));
```

```
printf("Size of char = %d bytes \n", sizeof(c));
```

```
printf("Size of double = %d bytes \n", sizeof(d));
```

```
getch();
```

ON

Output

|                          |
|--------------------------|
| Size of int = 4 bytes    |
| Size of float = 4 bytes  |
| Size of double = 8 bytes |
| Size of char = 1 byte.   |

## Algorithm

Start C

- 1) take a as int, b as float, c as char and d as double
- 2) Size of int is printed by taking sizeof int
- 3) Size of float is printed by taking sizeof float
- 4) Size of char is printed by taking sizeof char
- 5) Size of double is printed by taking sizeof double

Aim -

#include &lt; stdio.h &gt;

void

{ }

Pr

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ALNRAO

Prachyal 10

Aim - Write a C program to demonstrate ternary operator.

```
#include <stdio.h>
void main ()
{
 int a, b, c;
 clrscr();
 printf ("Enter the number : ");
 scanf ("%d", &a);
 printf ("Enter second number : ");
 scanf ("%d", &b);
 c = (a > b) ? a : b;
 c = (a > b) ? a : b;
 printf ("largest number between %d & %d is %d",
 a, b, c);
 getch();
```

PLNRAD

Output

Enter the number: 5

Enter second number: 10

longest number between 5, or 10 is 10

Algorithm:

- Start C
- 1) Include header file
- 2) Assign value to a and b
- 3) Using ternary operator assign c as  $c:(a > b)? a : b;$
- 4) print the largest number between a and b



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ANURAG

Practical No 17

Aim - Write a C program to check whether an integer entered by the user is odd or even

#include <stdio.h>

void main()  
{

int a ;

clrscr();

printf ("Enter the number:");

scanf ("%d",&a);

if (a % 2 == 0)

{

    printf ("The number is even");

}

else

{

    printf ("The number is odd");

getch();

}

PM

ALNRAU

Output:

Enter the number : 5

The number is odd.

Algorithm

Start

1] Include header file

2] Assign a value in a

3] Apply if else statement as  $\text{num} \% 2$   
if yes print it is an even number  
else print it is an odd number



### Practical - 18

Aim - Write a C program to find maximum between two numbers

```
#include<stdio.h>
void main()
{
 int a, b;
 clrscr();
 printf("Enter the first number:");
 scanf("%d",&a);
 printf("Enter the second number:");
 scanf("%d,&b");
 if(a>b)
 {
 printf("%d is greater than %d",a,b);
 }
 else
 {
 printf("%d is greater than %d",b,a);
 }
 getch();
}
```

AUN RAO

Output.

Enter first number : 5

Enter Second number : 9

a is greater than b

Algorithm

Start

1) Include header file

2) Assign value of two numbers

3) Apply if else statement as  
if (a > b) : if yes  
print a is greater than b  
else b is greater than a



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Practical - 19

Aim - Write a <sup>C</sup> program to find maximum between two <sup>or three</sup> numbers

```
#include<stdio.h>
void main()
{
 int a,b,c,max;
 clrscr();
 printf("Enter the value of three numbers:");
 scanf("%d%d%d", &a, &b, &c);
 max = a > b ? (a > c ? a : c) : (b > c ? b : c);
 printf("The greatest among a,b and c is %d", max);
 getch();
}
```

(P)

Output

P1. sort10A

Enter value of three numbers : 1 2 6

The greatest number among 10, 60 and 10  
maximum

Algorithm:

Start C

- 1} Include header file
- 2} Assign value of a, b & c in ini
- 3} Apply ternary operator as  $a > b$  if yes print a else  $c$   
in if  $a > c$  if yes print b else c  
and  $b > c$  if yes print c
- 4} Print maximum of three numbers: ] ) {

```

("maximum know at. stn") {
 ((d, b, b, b)) {
 ((d, b, b, b)) {
 ((d, b, b, b)) {
 ((d, b, b, b)) {
 ((d, b, b, b)) {
 ((d, b, b, b)) {
 ((d, b, b, b)) {
 ((d, b, b, b)) {
 ((d, b, b, b)) {
 ((d, b, b, b))
 }
 }
 }
}

```



## Practical - 20

Aim - Write a C program to check positive, negative or zero

```
#include<stdio.h>
void main()
{
 int a;
 clrscr();
 printf("Enter value of A:");
 scanf("%d", &a);
 if (a > 0)
 {
 printf("Value of A is a positive");
 }
 else if (a < 0)
 {
 printf("Value of A is negative");
 }
 else
 {
 printf("Value of A is zero");
 }
 getch();
}
```

OP

AL AIRA

Output

Enter value of A: 15  
Value of A is positive.

Algorithm:

- 1) Include header file
- 2) Assign value of A
- 3) Apply if else statement that (a>0)

"Print it is positive , if else (a<0)  
Print it is negative, else (a=0)"

(from 'h' to 'z')  
(if (a > 0) {  
 cout << "Positive"  
}  
else if (a < 0) {  
 cout << "Negative"  
}  
else {  
 cout << "Zero"  
})



## Practical - 21

Aim - Write a C program to check whether a number is divisible by 5 and 11 or not.

```
#include <stdio.h>
void main()
{
 int a;
 clrscr();
 printf("Enter the value of A:");
 scanf("%d", &a);
 if (a%5 == 0)
 {
 printf("A is divisible by 5");
 }
 else if (a%11 == 0)
 {
 printf("A is divisible by 11");
 }
 else
 {
 printf("A is neither divisible by 5 or 11");
 }
 getch();
```

ALGORITHM

Output :

Enter the value of A : 15

Output A is divisible by 5

Algorithm

Start C

- 1] Include header file
- 2] Assign value of a
- 3] Apply if else statement that  
if  $a \% 5 == 0$ : print it is divisible by 5  
 $(a \% 11 == 0)$ : print a is divisible by 11  
else print it is neither divisible by 5  
nor 11

{ "using a & A to output" } { print }

(0,0)

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

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25

26

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## Practical - 22

Aim - Write a C program to check whether a character is alphabet, digit or special character.

```
#include <stdio.h>
void main()
{
 char r;
 clrscr();
 printf("Enter a character:");
 scanf("%c", &r);
 if ((r >='a' && r <='z') || (r >='A' && r <='Z'))
 {
 printf("Entered character is an alphabet.");
 }
 else if (r >='0' && r <='9')
 {
 printf("Entered character is a digit.");
 }
 else
 {
 printf("Entered character is a special character.");
 }
 getch();
```



Output: 15. 1001001

- Enter word (character) 5719 ) a digit
- Enter character (is it a digit or a letter)

Aim - Wch

Algorithm:

```

Start
1) Include header file
2) Assign value of r
3) Apply if-else statement that if
 (r>='a' && r<='z') || (r>='A' && r<='Z')
 print r is an alphabet
 Else if (r>='0' && r<='9')
 print r is a digit
 Else print r is a special character
 (if odd with 1001001)
}

```

```

#include
void m
{
char
prin
print
Scan
if C
{
}
pri
}
else
{
}

```



## Practical - 23

Aim: Write a C program to check uppercase or lowercase character

```
#include <stdio.h>
void main()
{
 char p;
 clrscr();
 printf("Enter an alphabet:");
 scanf("%c",&p);

 if (p>='a' && p<='z')
 {
 printf("%c is a lowercase alphabet",p);
 }
 else if (p>='A' && p<='Z')
 {
 printf("%c is an uppercase character alphabet",p);
 }
 else
 {
 printf("%c is not an alphabet",p);
 }
 getch();
}
```

OR

ALGORITHM

Output:

Enter an alphabet. /kjhdsf  
K is a lowercase alphabet

Algorithm to convert a character into its ASCII value

Start C

③ Include header file.

② Assign a value to p

Apply if else statement & (p>='a' & p<='z')  
print p is lowercase

else if (p>='A' & p<='Z')  
UPPERCASE  
else print p is not an alphabet



## Practical - 24

Aim - Write a C program to check uppercase or lowercase character using library function

```
#include <ctype.h>
```

```
#include <stdio.h>
```

```
void main()
```

```
{ char a;
```

```
clrscr();
```

```
printf("Enter an alphabet : ");
```

```
scanf("%c", &a);
```

```
if (a <= 'z' && a >= 'a')
```

```
{ printf("%c is an lowercase alphabet - ", a); }
```

```
else if (a <= 'Z' && a >= 'A')
```

```
{ printf("%c is an uppercase alphabet ", a); }
```

```
else
```

```
{ printf("%c is not an alphabet.", a); }
```

```
getch();
```

A (MIRAN)

Output:

Enter an alphabet: M

M is on uppercase alphabet

Algorithm

① Start C

- ② Include header files (stdio.h and ctype.h)
- ③ Assign a value to a
- ④ Apply if else statement if  
    Print a is a lowercase alphabet  
    else if (isupper(a)) Print a is on uppercase  
    alphabet  
    else a is not on alphabet



Practical - 25

Aim: Write a C program to check vowel or consonant

#include <stdio.h>

void main ()  
{

char c;

int l vowel, u vowel

clrscr();

printf("Enter an Alphabet:");

scanf("%c", &c);

l vowel = (c == 'A' || c == 'E' || c == 'I' || c == 'O' || c == 'U');

u vowel = (c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u');

if (l vowel || u vowel)

{

printf("%c is a vowel", c);

}

else

{

printf("%c is a consonant", c);

}

getch();

{

By

ALNIRAO

## Output

Enter an alphabet: A. Is it a vowel  
A is a vowel

## Algorithm

Start

- 1) Include header file
- 2) Assign value to character
- 3) Apply if else statement  
 $\text{if } (c == 'A' \text{ || } c == 'E' \text{ || } c == 'I' \text{ || } c == 'O' \text{ || } c == 'U')$   
 $\text{if } (c == 'a' \text{ || } c == 'e' \text{ || } c == 'i' \text{ || } c == 'o' \text{ || } c == 'u')$
- 4) Print it is vowel
- 5) Else print it is consonant



### Practical - 26

Aim: Write a C program to calculate marks of the students

#include <stdio.h>

void main()

{

int marks, perct;

clrscr();

printf("Enter total mark obtained");

scanf("%d", &marks);

perct = marks / 5;

if (perct >= 70)

{ printf("Grade A %d", perct);}

}

if (perct >= 55) && (perct <= 70)

{ printf("Grade B %d", perct);}

}

if (perct >= 40) && (perct <= 55)

{ printf("Grade C %d", perct);}

}

if (perct < 40)

{

else

{ printf("Fail");}

}

ACNIRAO

Output :

Enter total marks obtained : 420

According to Grade A+ 80% mark > 70, M

Algorithm

Start

- 1) Include header file
- 2) Assign value to marks (www, lswav)
- 3) Take perct = marks / 5
- 4) Apply if else statement if no result  
if (perct >= 70) {  
 if (perct >= 55) && (perct <= 70) {  
 cout << "Grade A+ 80%" ;  
 } else if (perct >= 40) && (perct <= 55) {  
 cout << "Grade B 70%" ;  
 } else {  
 cout << "Grade C 60%" ;  
 }  
}



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ALNIPAO

Practical 2)

Aim - Write a C program to print Hello world 10 times  
using for loop

```
#include<stdio.h>
void main()
{
 int i;
 clrscr();
 for(i=1; i<=10; i++)
 {
 printf("Hello World \n");
 }
 getch();
}
```

PLNPAI

Output

Hello World  
Hello World  
Hello World  
Hello World  
Hello World  
Hello World  
Hello WorlN  
Hello WorlD  
Hello WorlD  
Hello WorlW

Algorithm

- 1) Include header file
- 2) Apply for loop
- 3) C(i, i <= 10, i++)
- 4) Print Hello WorlW



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ALNIRAO

Practical 28

Aim - Write a C program to print 1 to 10 nos using  
for loop

```
#include <stdio.h>
void main()
{
 int i;
 clrscr();
 for(i=1; i<=10; i++)
 {
 printf("%d\n", i);
 }
 getch();
}
```

A(NRAO

Output

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

CC initial

Algorithm (Start)

- 1} Include header file
- 2} Implement for loop
- $i = 1$  ;  $i \leq 10$  ;  $i++$
- 3} Print the numbers



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ALNIAAD

Practical No 29.

Aim - Write a C program to print Square of  
1 to 10 integers using for loop

```
#include <stdio.h>
void main()
{
 int i
 clrscr()
 for(i=1;i<=10;i++)
 {
 printf("%d\n", i*i)
 }
 getch()
}
```

Al N R A C

## Output

1  
4  
9  
16  
25  
36  
49  
64  
81  
100

Algorithm (Start)

- 1) Include header file
- 2) Implement for loop condition  
 $i = 1, i^2 \leq 10, i + 1$
- 3) Print Square of numbers



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ALNIRAO

Practical No. 30.

Aim - Write a C program to calculate sum of first n natural number using for loop

```
#include <stdio.h>
void main()
{
 int i, a, sum;
 clrscr();
 printf("Enter a number:");
 scanf("%d", &a);
 sum = 0
 for (i = 1, i <= a; i++)
 {
 sum += i
 if (i == a)
 {
 printf("%d\n", sum);
 }
 getch();
 }
}
```

A L N RAO

Output

Enter a Number, 100  
5050

Algorithm:

- 1) Start C
  - 2) Include header file
  - 3) Assign a number
  - 4) Implement for loop  
 $(i=1, i \leq a, i++)$
  - 5) Assign sum: sum + i
- Print the sum of numbers



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ALM 10

Practical No 31

Aim - Write a C program to generate the multiplication  
of table upto 10 using for loop

```
#include <stdio.h>
void main ()
{
 int i, n;
 clrscr();
 printf("Enter a number:");
 scanf("%d", &n);
 for (i = 1; i <= 10; i++)
 {
 printf("%d x %d = %d\n", n, i, i * n);
 }
 getch();
}
```

ALNRAO

Output

Enter a number: 2

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

Algorithm

Start

1) Include header file

2) Assign a number,

3) Input for loop

4) Print condition

5) Print the table of assignment



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Practical No 32

Aim - Write a C program to find factorial of the number using for loop

```
#include<stdio.h>
void main()
{
 int i,n,f=1
 printf("Enter a number");
 scanf("%d",&n);
 for (i=1 ; i<=n ; i++)
 f=f*i
 printf("The factorial of %d is %d",n,f);
 getch()
}
```

ALNRAO

### Output

Enter a number: 5

The factorial of 5 is 120

### Algorithm

- 1) Start C
- 2) Include header file
- 3) Insert a number
- 4) Implement for loop condition  
 $(i=1; i \leq n; i++)$
- 5) Insert  $f = f * i$
- 6) Print factorial of number



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ALNAPC

Practical No 33

Aim - Write a C program to print half pyramid using \* using for loop

```
#include <stdio.h>
void main()
{
 int row, i, j;
 clrscr();
 printf("Enter no of rows:");
 scanf("%d", &row);
 for (i = 1, i <= row, ++i)
 {
 for (j = 1; j <= (j + i))
 printf("*");
 printf("\n");
 }
 getch();
```

ALNRAO

Output:

Enter No of rows: 4

\*

\*\*

\*\*\*

\*\*\*\*

Algorithm.

Start C

- 1) Include header file
- 2) Assign no of rows
- 3) Imply for loop  
 $i = 1; j = row; i++$
- 4) Under it again imply for loop  
 $j = 1; j < i; j++$
- 5) Print \* for pyramid
- 6) print the pyramid



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Pratik

Practical No 34

Qn:- Write a C program to print half pyramid  
using numbers using for loop

Include <stdio.h>

void main()

{ int rows, i, j;

clrscr();

printf("Enter no of rows:");  
scanf("%d", &rows);

for (i=1; i<=rows; i++)

{ for (j=1; j<=i; j++)

printf("%d", j);

printf("\n");

getch();

ALNIRAC

Output.

Enter No of rows : 3

1 2  
1 2 3

Algorithm.

Start C

- 1) Include header file
- 2) Assign no of rows
- 3) Implement for loop  
 $i = i; i \leq \text{rows}; i++$
- 4) Under it again imply for loop
- 5) print the pyramid
- 6) print pyramid



Aim - Write a C program to check leap year, (century leap year and if the leap year is perfectly divisible by 4)

#include <stdio.h>

void main ()

{

int year;  
clrscr();

printf("Enter a year");

scanf("%d",&year);

if (year % 4 == 0)

{ print ("%d is a leap year", year);

if (year % 100 == 0)

{ print ("%d is a century leap year", year);

if (year % 400 == 0)

{ print ("%d is perfectly divisible by 4", year);

else

{ print ("%d is not perfectly divisible by 4", year);

else

{ print ("%d is not a century leap year", year);

else

{ print ("%d is not a leap year", year);

getch();

ALNIRAO

Defn.: A leap year is exactly divisible by 4 except for century leap years.  
The century leap year is perfectly divisible by 400.

Output:

Enter a year : 2004

2004 is a leap year

2004 is not a century leap year

Algorithm..

Start

1) Include header file

2) Assign value to year

3) Apply if else statement

if (year % 4 == 0)

if (year % 100 == 0)

if (year % 400 == 0)

4) Print else statement . If not



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ALN RAC

Practical No 36

Aim - Write a C program to find GCD using loop and if statement using for loop

{

```
#include<stdio.h>
```

```
void main()
```

{

```
int n1,n2,i,gcd;
```

```
clrscr();
```

```
printf("Enter two integers:");
```

```
scanf("%d %d",&n1,&n2);
```

```
for(i=1;i<=n1 && i<=n2;++)
{
```

```
if(n1%1==0 && n2%1==0)
 gcd=i;
```

}

```
printf("G.C.D of %d and %d is %d",n1,n2,gcd)
```

```
getch();
```

}

ALNRAS

Output:

Enter two integers 20  
14

GCD of 20 and 14 is 2

Algorithm

Start

1) Include header file

2) Assign values to two integers  
3) for i = 1; i <= n1 && i <= 2 + 1  
if (n1 % i == 0 && n2 % i == 0)  
gcd = i

4) print gcd of numbers



Practical No. 37

Write a Aim. Write a C program to print pyramid using \* using for loop

```
#include<stdio.h>
#include<stdio.h>
void main()
{
 int i, space, rows, k=0;
 printf("Enter no of rows:");
 scanf("%d", &rows);
 for (i=1; i<=rows; ++i, k=0)
 {
 for (space=1; space<=rows-i+1+space)
 {
 printf(" ");
 }
 while (k!=2*i-1)
 {
 printf("*");
 k++;
 }
 printf("\n");
 }
}
```

ALNRAO

Output

Enter no of rows: 3

\* \* \*  
\* \* \*  
\* \* \* \*

Algorithm:

Start C

1) Include header file

2) Assign value to no of rows

3) use for loop

(i = 1; i <= rows; ++i, k = 0)

for loop again

(space = 1; space <= rows - 1; space++)

while loop

(k = 1; k <= 1)

(++k)



Practical No. 38

Aim - Write a C program to find Fibonacci series upto n terms using for loop

```
#include <stdio.h>
void main()
{
 int i, n, t1=0, t2=1, nextTerm;
 clrscr();
}
```

```
printf("Enter the number of terms")
scanf("%d", &n);
```

```
for (i = 1; i <= n; i++)
{
 printf ("%d", t1);
 nextTerm = t1 + t2;
 t1 = t2;
 t2 = nextTerm;
}
```

getch();

By

ALNIRAD

Output

Enter number of terms : 5

1, 1, 2, 3, 5

Algorithm  
Start c

Include header file

Assign value to number of terms

use for loop

(i=1; i<=n; i++)

Print fibonacci series.



Practical No 4239

Aim - Write a C program to print Hello world 10 times using while loop

```
#include<stdio.h>
void main()
{
 int i=1;
 clrscr();
 while(i<=10)
 {
 printf("Hello World\n",i);
 i++;
 }
 getch();
}
```

Qm

ALNIRAU

Output

Hello World  
Hello World

Algorithm

Start

- ① Include header file
- ② Use while loop  
 $(i \leq 10)$
- ③ Print Hello World



### Practical No 4D

Aim - Write a C program to print 1 to numbers 1 to 10 using while loop

```
#include <stdio.h>
void main()
{
 int i=1,
 clrscr();
 while (i<=10)
 {
 printf ("%d\n", i);
 i++;
 }
 getch();
}
```

ALNIRAD

Output

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

Algorithm.

- 1 Start C
- 2 Include header file
- 3 Use while loop ( $i \leq 10$ )  
 $i++$
- 4 Print 1 to 10 numbers



Practical No. 4041

Aim-Write a C program to print numbers from 1 to 10 using while loop

```
#include <stdio.h>
void main()
{
 int i=1;
 clrscr();
 while (i<=10)
 {
 printf ("%d \n", i);
 i++;
 }
 getch();
}
```

On

ALNIDAO

Output

1  
4  
9  
16  
25  
36  
49  
64  
81  
100

Algorithm  
Start C

- 3) Include header file
- 2) Use while loop ( $i \leq 10$ )  
Print  $i \times i$   
 $i = i + 1$
- 3) Print square of 1 to 10



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PLNPA

Practical No 3942

Aim - Write a C program to calculate sum of natural nos using while loop

```
#include <stdio.h>
Void main()
{
 int i=1,sum=0,a;
 clrscr();
 printf("Enter a Number:");
 scanf("%d",&a);
```

```
while(i<=a)
{
 sum += i;
 if (i == a)
 {
 printf("%d\n", sum);
 }
}
```

i++;

}

getch();

ALMIRAO

Output:

Enter a Number : 100  
5050

Algorithm  
Start C

- 1) Include header file
- 2) Assign a value to numbers
- 3) Use while loop  
 $(i \neq 0)$
- 4) Use if statement  
 $\text{if } (i \neq 0)$   
 $i++$



### Practical No 43

Aim- Write a C program to generate multiplication table 1 to 10 using while loop

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
int i = 1, n;
```

```
clrscr();
```

```
printf("Enter a number:");
```

```
scanf("%d", &n);
```

```
while (i <= 10);
```

```
{
```

```
printf ("%d x %d = %d \n", n, i, i * n);
```

```

```

```
 i++
```

```
 3
```

```
getch();
```

```
}
```

ALNRAO

Output

Enter a number: 2

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

Algorithm

Start C

- 1) Include header file
- 2) Assign a value to number
- 3) while ( $i \leq 10$ )  
     $i++$
- 4) Print table



Practical No 44

Aim - Write a C program to find factorial of number using while loop

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
i,n,f;
```

```
f = i = 1;
```

```
cclrscr();
```

```
print("Enter a Number:");
```

```
scanf("%d",&n);
```

```
while(j <= n)
```

```
{
```

```
f *= i;
```

```
i++; j++;
```

```
} printf("The Factorial of %d is %d",n,f);
```

```
I+F)
```

```
}
```

```
getch();
```

ALNRAO

Output

Enter a Number : 5

Factorial of 5 is 120

Algorithm

Start C

- 1) Use header file
- 2) Assign value to number
- 3) Use while loop (i<=n)  
    i++
- 4) Print factorial of number



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Department of Computer Science

PLNDAO

Aim.

Practical No 4S

Write a C program to print half pyramid  
using + in while loop

#include <stdio.h>

void main()

{ int row,i,j,k;

clrscr();

printf("Enter no of rows:");

scanf("%d",&rows);

i = 1;

while (i <= row)

{

j = 1;

while (j <= i)

{

j++;

printf("+");

}

j++;

printf("\n");

}

getch();

PLNR AO

Output:  
Enter no of rows = 4

\*  
\* \*  
\* \* \*  
\* \* \* \*

Algorithm

Start C

- 1) Include header file
- 2) Assign no of rows
- 3) Use while loop  
 $(i <= \text{row})$
- 4) Use while loop  
 $(j < i)$   
 $i++ j$



### Practical - L6

Aim - Write a C program to print half pyramid using numbers in while loop

```
#include<stdio.h>
void main()
{
 int row, i=1 j=1;
```

```
clrscr();
printf ("Enter no of rows:");
scanf ("%d", &row);
```

```
while (i <= row)
```

```
{ j=1
 { j=1 while (j <= i)
 }
```

~~```
        printf ("%d", j);
        j++;
    }
```~~~~```
 i++;
}
```~~~~```
printf ("\n");
}
```~~~~```
getch();
}
```~~

ALGORITHM

Output

Enter no of rows : 3

1 2

1 2 3

Algorithm

Start C

- 1) Include header file
- 2) Assign value to no of rows
- 3) Use while loop ( $i \leq \text{row}$ )  
    i++;
- 4) Use while loop again ( $j \leq i$ )
- 5) Print half pyramid



Practical No 47

Aim - Write a C program to print Hello World 10 times using do while loop

```
#include<stdio.h>
void main()
{
```

int i=1;

clrscr();

```
do
{
```

printf ("Hello World\n", i);

i++;

}

```
while (i<=10);
```

getch();

}

ALNIRAO

Output:

Hello World  
Hello Worl

Algorithm

Start

- 1) Use header file
- 2) Use do while loop
- 3) ++i
- 4) while (i < 10)  
   |  
   | Hello world



### Practical No 48

Aim- Write a C program to print numbers from 1 to 10 using do while loop

```
#include<stdio.h>
void main()
{
 int i=1;
 clrscr();
 printf("Enl
do
 &do
 printf ("%d\n",i);
 i++;
 while (i<=10);
 getch();
}
```

PLANTAO

Output

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

Algorithm

Start C

- 1) Use header file
- 2) Use do while do
- 3)     do  
        $i++$   
       while ( $i < 10$ )
- 4) Print numbers from 1 to 10



## Practical No 49

Aim- Write a C program to print squares of numbers from 1 to 10 using do while

```
#include <stdio.h>
void main ()
{
 int i=1;
 clrscr();
 do
 {
 printf ("%d\n", i*i);
 i++;
 }
 while (i<=10);
 getch();
}
```

OR

ALNRAO

Output

4  
9  
16  
25  
36  
49  
64  
81  
100

Algorithm

Start C

- 1) Use header file.
- 2) Use do while loop
- 3) ~~while (i <= 10)~~  
~~++i~~  
~~(i \* i)~~
- 4) Print Squares of Numbers from 1 to 10



Practical No 50

Aim - Write a program to multiply calculate sum of first no n natural nos using do while loop

```
#include <stdio.h>
void main()
```

```
{ int i=1,sum=0,a;
clrscr();
```

```
printf("Enter a Number:");
scanf("%d",&a)
```

```
do
```

```
{
```

```
sum+=i;
```

```
,if (i==a)
```

```
{
```

```
printf("%d\n",sum);
```

```
}
```

```
i++;
```

```
}
```

```
while (i<=a)
```

```
getch();
```

```
}
```

ALNRAO

Output

Enter a Number : 100  
5050

Algorithm  
Start C

- 1) Include header file
- 2) Use Assign a value to number
- 3) Use do while loop
  - do
  - (sum += i)
  - if (i == 0)
  - print (sum)
  - i++
- 4) while (i <= a)



Practical No 51

Aim - Write a C program to generate multiplication table 1 to 10 using do while loop

#include <stdio.h>

void main()

{  
int i=1,n;

clrscr();  
printf (" Enter a number:");  
scanf ("%d",&n);

do

{

printf ("%d x %d = %d \n",n,i,i\*n);

i++

} }  
getch();

} while (i<=10)

getch();

}

### Output

Enter a number : 2

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

### Algorithm

Start C

- 1) Include header file
- 2) Assign a value to number
- 3) Use do while loop
  - print ( $i \times n$ )
  - $i++$
- 4) while ( $i <= 10$ )



Practical No 582

Aim: Write a C program to print half pyramid using do while loop

#include <stdio.h>

void main()

{

int a, b, c, d, i;

clrscr();

printf ("Enter a number :");

scanf ("%d", &a);

printf ("Enter another number :");

scanf ("%d", &b);

c = b;

if (a > b)

{ c = a;

}

i = 1;

while (i <= c)

{

if (a % i == 0 && b % i == 0)

{

d = i;

}

i++;

printf ("The G.C.P of %d and %d is %d\n", a, b, d);

getch();

PLMIRAO

Output

Enter a number : 100

Enter another number : 200

The GCD of 100 and 200 is 100

Algorithm

Take header file

Assign value to two numbers

(a>b)

Do while ( $a > b$ )

Use if ( $a \% 1 == 0$  &  $b \% 1 == 0$ )



## Practical No 53

Aim - Write a C program to print pyramid of \* using while loop

```
#include <stdio.h>
void main()
{
 int a, i, j, c, space, k, t;
 clrscr();
 printf("Enter number of rows:");
 scanf("%d", &a);
 c = a * 2;
 space = a * 2;
 printf("\n");
 i = 1;
 k = a * 2;
 t = 1;
 R(07)
 {
 while (t < k)
 {
 printf(" ");
 t++;
 }
 }
}
```

ACINRAO

Output

Enter Number of rows: 3

\*  
\* \* \*  
\* \* \* \* \*

Algorithm

Start C

- 1 Include header file
- 2 Assign value to number of rows
- 3 Use while statement: ( $i < k$ ) ( $\text{Sc-space}$ ) ( $j < i$ )  
4 Iterate and print Pyramid



```
while (i < 0)
{
 if (i % 2 != 0)
 j = i;
 while (j <= space)
 printf(" ");
 j++;
}

j = 1;
while (j <= i)
{
 printf("*");
 j++;
}

j = 1;
while (j <= 2 * i + 1)
{
 printf("*");
 j++;
}

printf("\n");
```

## Practical No 8.

Aim- Write a C program to print fibonacci sequence upto n number using while loop

```
#include <stdio.h>
void main()
{
 int n1, n2, n3, a, i;
 clrscr();
 printf("How many terms? ");
 scanf("%d", &a);
 n1 = 0;
 n2 = 1;
 if (a == 1)
 {
 printf("0");
 }
 else if (a < 1)
 {
 printf("Fibonacci series cannot be printed");
 }
 else
 {
 printf("\n0\n1\n");
 i = 2;
 while (i < a)
```

ALNIRAO

Output:

How many terms? 5

1

2

3

5

Algorithm:

Start C

- 1) Include header file
- 2) Assign value to terms
- 3) Use while loop (i<=0)
- 4) Iterate and print fibonacci series



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```
printf(" %d \n", n3);
n1 = n2;
n2 = n3;
j++;
}
}
getch();
}
```



Practical No. 55

Aim - Write a C program to print half pyramid using numbers with do while loop

```
#include <stdio.h>
void main()
{
 int a, i, j;
 clrscr();
 printf ("Enter a Number : ");
 scanf ("%d", &a);
 i = 1;
 do
 {
 j = 1;
 do
 {
 printf ("%d", j);
 j++;
 }
 while (j <= i);
 printf ("\n");
 i++;
 }
 while (i <= a);
 getch();
}
```

ALNIRAC

Output.

Enter a Number: 3

1

1 2

1 2 3

Algorithm.

Start

- 1) Include headerfile
- 2) Assign value to Number
- 3) Use while loop ( $j \leq 1$ )  
    while ( $j \leq 1$ )
- 4) Use do while  
    while ( $i \leq 0$ )
- 5) print half pyramid using do while loop



## Practical No 56

Aim: Write a C program to print half pyramid using do while loop on d.

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
int a, i, j;
```

```
clrscr();
```

```
printf("Enter a Number:");
```

```
scanf("%d", &a);
```

```
i = 1;
```

```
do
```

```
{ j = 1;
```

```
do
```

```
{
```

```
printf("*");
```

```
j++;
```

```
}
```

~~```
while (j <= i);
```~~~~```
j++; printf("\n");
```~~

```
}
```

~~```
while (i <= a);
```~~

AL MRAO

Output

Enter a Number : 3

→

→ *

→ * *

Algorithm
Start

- 1) Include header file
- 2) Assign value to number
- 3) Use do while loop
 while ($j \leq i$)
 j++
- 4) Use do while loop again
 while ($i < 9$)
 i++
- 5) Print half pyramid using do while loop



Practical No 5)

Aim: Write a C program to find factorial of a number using do while loop

```
#include <stdio.h>
void main()
{
    int i, a, fact;
    clrscr();
    printf("Enter a Number = ");
    scanf("%d", &a);
    i = 1;
    fact = 1;
    do
    {
        fact *= i;
        if (i == a)
        {
            printf("%d", fact);
        }
        i++;
    } while (i != a);
    getch();
}
```

ALCIRAO

Output

Enter a Number : 5

120

Algorithm
Start C

- 3) Include header file
- 3) Assign value to Number.
- 3) Use do while loop

do

fact *= i

if (i == 0)

while (i <= n)

4) Print factorial



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PLNDAO

Practical No 58.

Aim - Write a C program to find GCD using do while loop.

#include <stdio.h>

void main()

{

int a,b,c,d,e;

clrscr();

printf("Enter a number:");

scanf ("%d", &a);

printf("Enter another number:");

scanf ("%d", &b);

c=b;

if (a>b)

&c=a;

}

i=1;

do

{ if (a % i == 0) & & b % i == 0)

{

c=i;

}

j++;

} while (i <= c);

printf ("The GCD of %d and %d is %d", a, b, c);

ALNRAO

Output:

Enter a Number : 3

Enter another number : 6

3

Algorithm

Start C

- 3) Include header file
- 3) Assign value to both the numbers
- 3) use if ($a > b$)
- 4) Use do while loop
do
 if ($a \% i == 0 \& \& b \% i == 0$)
 while ($i \leq c$)
- 5) print GCD

Practical No 59

Aim-Write a C program to print pyramid of stars using do while loop

```
#include <stdio.h>
void main()
{
    int a,i,j,c,space,k,t;
    clrscr();
    printf("Enter Number of rows :");
    scanf("%d",&a);
    c=a+2;
    t=-1;
    space=a+2;
    printf("\n");
    i=1;
    k=a+2;
    t=1;
    if(a>1)
        do
    {
        printf("  ");
        t++;
    } while(t<k);
    printf("\n");
}
```

ALNIRAO

Output
Enter number of Rows : 3

*
* * *
* * * *

Algorithm

Start C

- 1) Include header file
- 2) Assign value to rows
- 3) Use if ($a > i$)
- 4) Use while ($i < k$) ($j < space$) ($j <= i$) ($j <= i + j$)
- 5) Iterate and print pyramid using do while



```
{  
if (i % 2 == 0)  
{
```

```
    g = 1 i
```

```
do
```

```
{
```

```
    printf(" ");
```

```
    j++ i
```

```
while (j <= space);
```

```
j = 1 i
```

```
do
```

```
{
```

```
    printf(" * ");
```

```
    j++ i
```

```
{
```

```
while (j <= i);
```

```
j = 1 i
```

```
do
```

```
{
```

```
    printf(" * ");
```

```
    j++ i
```

~~```
5 while (j <= i + 1);
```~~

```
{
```

```
printf("\n");
```

```
i++ i
```

```
Space = 1 i
```

~~```
3 while (i < c)
```~~~~```
3 getch();
```~~



Pract No 60

Aim: Write a C program to print Fibonacci series using do while loop number

#include <stdio.h>

void main()

{

int n1=0, n2=1, n3, a, i;

clrscr();

printf("How many terms?")

scanf("%d", &a);

if (a == 1)

printf("%d", 1);

else if (a < 1)

{ printf("Fibonacci series cannot be printed")

}

else

{

printf("\n0\n1\n");

i = 2;

do

{ n3 = n1 + n2;

printf("%d\n", n3);

n1 = n2;

n2 = n3;

i++;

} while (i < a)

} getch();

ACM RAO

Output  
How many terms? 5  
1  
1  
2  
3  
5

Algorithm  
Start  
1) Include header file  
2) Assign value to terms  
3) If  $a <= 0$   
else if  $b < 0$   
else  
4) Use do while loop  
 $n_3 = n_1 + n_2;$   
while ( $c \leq 0$ )  
5) Print fibbonacci series.



Practical No. 01

Aim: Write a C program to find prime number using break statements

#include <stdio.h>

void main()

{

int a,b,i;

clrscr();

printf ("Enter a number:");

scanf ("%d", &a);

b=a+1

for (i=2; i<b; i++)

{

if (a% i == 0)

{

printf ("%d is not a prime number.", a);

break,

}

if (a==i-1)

{

printf ("%d is a prime number.", a);

break;

}

getch();

OR

ACM000

Output

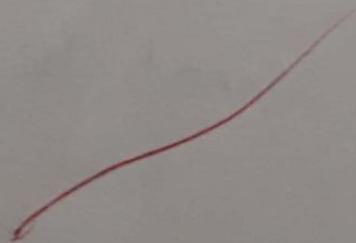
Enter a Number: 7

7 is a prime number

Algorithm

Start

- 1} Include header file
- 2} Assign a value to number
- 3} Use for loop  
    for ( $i = 2$ ;  $i < b$ ,  $i++$ )  
        if ( $a \% i == 0$ )  
            break  
        if ( $i == b$ )  
            break
- 4} Use if statement and break





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Aim - Write a C program to find Fibonacci series upto n terms using continue statement

#include <stdio.h>

void main()

{

int n1, n2, n3, o, i;

clrscr();

printf ("How many terms? ");

scanf ("%d", &o);

n1 = 0; printf ("%d\n", n1);

n2 = 1; printf ("%d\n", n2);

if(o > 1)

{

for (i = 1; i < = o; i++)

{

n3 = n1 + n2;

printf ("%d\n", n3);

n1 = n2;

n2 = n3;

i++;

continue;

{

ALNRAO

How many terms? S

1  
1  
2  
3  
5

Algorithm

Start C

- 1) Include header file
- 2) Assign value to terms
- 3) Use if statement (a>i)
- 4) Use for loop (i=1 to n)
- 5) Iterate and print Fibonacci



Aim - To write a drive menu driven C program which has following options:

1. factorial of a number
2. Prime number checker
3. Odd or even number checker
4. Exit

#include <stdio.h>

void main()

{

int a,b,fact,i,dic,e,j;

clrscr();

printf("1. Factorial of a Number\n2. Prime number  
Checker\n3. Odd or Even checker.\n4. Exit");

printf("\n\nEnter your option:");

scanf("%d",&a);

switch(a)

{

Case 1 :

printf("\nEnter a Number :");

scanf("%d",&b);

fact = 1;

for (i=1; i<=b; i++)

{

fact \*= i;

} (i == b)

{

ALNPKB

### Output

1. Factorial of a Number
2. Prime Number Checker
3. Even or odd Checker
4. Exit

Enter your option : 3

Enter a number : 5

5 is an odd number

### Algorithm

Solv C

- 1) Include header file
- 2) Use switch case upto for 4 values
- 3) Take input on option
- 4) Display the statement for core user for selected



Printf("In factorial of %d is %d", 6);  
3  
3

Case 2 :

```
printf ("In Enter a Number :");
scanf ("%d", &c);
```

j = c - 1

```
for (j=2; j <= d; j++)
{ if (c % j == 0)
```

printf ("In %d is not a prime number", );  
break; }

else if (j == d)  
{ printf

```
printf ("In %d is a prime number",);
}
```

}

case 3 :

printf ("In Enter a number :")

scanf ("%d", &e);

if (e % 2 == 0)

{

printf ("In %d is an even number", e);

3

else

{



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AJNU

printf("\n%d is an odd number")

case 4:

printf ("\n Program Ended!");

default:

printf ("\n Out of range!");

3

getch();  
3



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ALN RAO

Practical No 6E4

declaration

Aim-Write a C program to print square of number using prototype

```
#include <stdio.h>
int Square (int);
void main ()
```

```
{ int number, answer;
clrscr();
```

```
printf ("Enter number:");
scanf ("%d", & number);
```

```
answer = Square (number);
```

```
printf ("Square of %d is %d", number, answer);
getch();
```

```
int Square (int n)
{
 return (n * n);
}
```

APR

ALNRAJ

Output  
Enter Number : 3  
Square of 3 is 9

Algorithm

Start C

- 1) Include header i.e.
- 2) Assign value to number.
- 3) Call int square (int n)
- 4) return ( $n \times n$ )
- 5) Print square of the number



### Practical No. 65

Aim- Write a C program to swap two numbers using call by values

```
#include <stdio.h>
```

```
void swap(int, int);
```

```
void main()
```

```
{
```

```
int n1, n2;
```

```
clrscr();
```

```
printf("Enter :two numbers to be swapped\n");
```

```
scanf("%d%d", &n1, &n2);
```

```
printf("In Before swap n1=%d and n2=%d", n1, n2);
```

```
swap(n1, n2);
```

```
getch();
```

```
}
```

```
void swap(int n1, int n2)
```

```
{
```

```
int temp;
```

```
temp = n1; n1 = n2;
```

```
n2 = temp;
```

```
printf("\nAfter swap n1=%d and n2=%d", n1, n2);
```

```
}
```

OP

## ALGORITHM

### Output

Enter two numbers to be swapped. 15  
20

Before swap

n<sub>1</sub> = 15 and n<sub>2</sub> = 20

After swap

n<sub>1</sub> = 20 and n<sub>2</sub> = 15

### Algorithm

Start C

① Include header file

② Include void function (int, int) /n

③ Assign values to numbers

④ Call void swap (int n<sub>1</sub>, int n<sub>2</sub>)

Int temp

temp = n<sub>1</sub>;

n<sub>1</sub> = n<sub>2</sub>

n<sub>2</sub> = temp

⑤ Print the swap statement



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Practical No - 66

Aim - Write a C program to swap two numbers using call by reference.

```
#include <stdio.h>
```

```
void swap(int * , int *);
```

```
void main()
```

```
{
```

```
int n1,n2;
```

```
clrscr();
```

```
printf("Enter two numbers to be swapped\n");
```

```
scanf("%d %d", &n1, &n2);
```

```
printf("In Before swap n1=%d and n2=%d", n1, n2);
```

```
swap(&n1, &n2);
```

```
printf("In After swap n1 = %d and n2 = %d", n1, n2);
```

```
getch();
```

```
void swap(int *n1, int *n2)
```

```
{
```

```
int temp;
```

```
temp = *n1;
```

```
*n1 = *n2;
```

```
*n2 = temp;
```

```
}
```

Q2

ALGORITHM

Output

Enter two numbers to be swapped : 15  
20

Before swap

n1 = 15 and n2 = 20

After swap

n1 = 20 and n2 = 15

Algorithm

Start C

- 1) Include header file
- 2) Include void swap function ( $\text{int}^*, \text{int}^*$ )
- 3) Assign value to numbers ("15" "20")
- 4) Call swap (&n1, &n2)
- 5) void swap ( $\text{int}^* \text{n1}$ ,  $\text{int}^* \text{n2}$ )  
int temp  
temp = \*n1  
n1 = \*n2  
\*n2 = temp
- 6) Print swap statement Lw



Practical No-67

Aim - Write a C program to find factorial of a number  
to print using recursive function

```
#include <stdio.h>
int factnum(int n);
void main()
{
```

```
 int num,fact;
 clrscr();
```

```
 printf("Enter value:");
 scanf("%d",&num);
```

```
 fact=factnum(num);
 printf("Factorial of %d is %d",num,fact);
 getch();
}
```

```
int factnum(int n)
```

```
{
```

```
 if(n==0)
```

```
 return(1);
```

```
 else
```

```
 return(n*factorial(n-1));
```

```
}
```

ALGORITHM

Output:

Enter value : 5  
Factorial of 5 is 120

Algorithm:

Start

{Include header file

{Include int factnum(int n) function

{Assign value to number

{Use if factnum function

if ( $n == 0$ )

return 1

else

return ( $n \times$  factnum ( $n - 1$ ))

print factnum statement



Practical - No 68

Aim - Write a C program to find average marks obtained by a class of 30 students in a test

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
int avg, sum = 0;
```

```
int i;
```

```
int marks[30];
```

```
clrscr();
```

```
for (i = 0; i <= 29; i++)
```

```
{
```

```
printf("\nEnter marks:");
```

```
scanf("%d", &marks[i]);
```

```
}
```

```
for (i = 0; i <= 29; i++)
```

```
{
```

```
sum = sum + marks[i];
```

```
}
```

```
avg = sum / 30;
```

~~printf("Average marks = %d", avg);~~~~getch();~~~~{}~~

PM

## ALGORITHM

Output:

Enter Marks: 20  
Enter Marks: 9  
Enter Marks: 12  
Enter Marks: 15  
Enter Marks: 16  
Enter Marks: 18  
Enter Marks: 9  
Enter Marks: 10  
Enter Marks: 11  
Enter Marks: 15  
Enter Marks: 14  
Enter Marks: 20  
Enter Marks: 19  
Enter Marks: 20  
Enter Marks: 6

Enter Marks: 8  
Enter Marks: 10  
Enter Marks: 12  
Enter Marks: 6  
Enter Marks: 7  
Enter Marks: 9  
Enter Marks: 18  
Enter Marks: 13  
Enter Marks: 19  
Enter Marks: 20  
Enter Marks: 11  
Enter Marks: 10  
Enter Marks: 14  
Enter Marks: 17

Average Marks: 13

Algorithm

Start C

- ① Include header file
- ② Assign value to number
- ③ Use for loop ( $i=0; i \leq 29; i++$ )
- ④ Use for loop again ( $i=0; i \leq 29; i++$ )  
 $sum = sum - marks[i]$
- ⑤ Print average marks

ACM

Output

Enter value for disp[0][0]: 3  
Enter value for disp[0][1]: 7  
Enter value for disp[0][2]: 8  
Enter value for disp[1][0]: 6  
Enter value for disp[1][1]: 2  
Enter value for disp[1][2]: 1

Two dimensional array

3 7 8  
6 2 1

Algorithm

Start

① Include header file.

② Assign value to disp[i][j]

③ Iterate the for loop [i < 2] and [j < 3]

④ Store the value in array and iterate for the value to display [i < 2] and [j < 3] for the value to display [i < 2] and [j < 3]



## Practical No - 69

Aim: Write a C program to store elements entered by user using Two dimensional array

```
#include <stdio.h>
void main()
{
 int disp[2][3];
 int i, j;
 clrscr();
 for (i = 0; i < 2; i++)
 {
 for (j = 0; j < 3; j++)
 {
 printf("Enter value for disp[%d][%d]", i, j);
 scanf("%d", &disp[i][j]);
 }
 }
 printf("Two dimensional array\n");
 for (i = 0; i < 2; i++)
 {
 for (j = 0; j < 3; j++)
 {
 printf("%d ", disp[i][j]);
 if (j == 2)
 {
 printf("\n");
 }
 }
 }
}
```



## Practical - No 70

Aim - Write a C program to add Two matrices using Multidimensional array

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
int r, c, a [100][100], b [100][100], sum [100][100], i, j;
printf ("Enter the number of rows: ");
scanf ("%d", &r);
printf ("Enter the number of columns: ");
scanf ("%d", &c);
```

```
printf ("\nEnter elements for 1st matrix:\n");
```

```
for (i=0; i<r; ++i)
```

```
for (j=0; j<c; ++j)
```

```
{
```

~~```
printf ("Enter elements a[%d][%d]", i+1, j+1);  
scanf ("%d %d", &a[i][j]);
```~~

```
}
```

```
printf ("\nEnter elements for 2nd matrix:\n");
```

```
for (i=0; i<r; ++i)
```

```
for (j=0; j<c; ++j)
```

~~```
printf ("Enter elements a [%d][%d]", i+1, j+1);
```~~~~```
scanf ("%d", &a[i][j]);
```~~

Output

Program

Enter number of rows : 2
Enter number of columns : 2

Enter elements for 1st Matrix

Enter element 11 : 2

Enter element 12 : 3

Enter element 21 : 1

Enter element 22 : 4

Enter elements for 2nd Matrix

Enter element 33 : 5

Enter element 12 : 2

Enter element 21 : 1

Enter element 22 : 2

Sum

7 5

2 6

Algorithm :

Start

1) Include header file

2) Use both the matrix

3) Use for loop to take values for

sum[i][j] : a[i][j] + b[i][j]

4) Use for loop to display the result



```
for (i=0; i<r; ++i)
for (j=0; j<c; ++j)
{
    sum[i][j] = a[i][j] + b[i][j]
}
```

```
printf ("\n Sum\n");
for (i=0; i<r; ++i)
for (j=0; j<c; ++j)
{
    printf ("%d ", sum[i][j]);
    if (j == c-1)
    {
        printf ("\n\n");
    }
}
getch();
```



Practical No. 71

Aim: Write a C program to demonstrate String function

```
#include <stdio.h>
```

```
#include <string.h>
```

```
void main()
```

```
{
```

```
char a[] = "First", b[] = "Second, C [ ] - non";
```

```
clrscr();
```

```
printf ("length of a = %d and length of b = %d\n", strlen(a),
```

```
strlen(b));
```

```
strcpy
```

```
printf ("In BEFORE COPYING: In a = %s and b = %s, a, b);
```

```
strcpy(c, a);
```

```
strcpy(a, b);
```

```
strcpy(b, 0);
```

```
printf ("In In AFTER COPYING: In a = %s and b = %s, a, b);
```

```
printf ("In In Concatenation of b and a = %s, strcat(b, a));
```

```
printf ("In In strcmp(a, b) = %d", strcmp(a, b));
```

```
printf ("In In lowercase d strcat(b, a) = %s", strlwr(b));
```

```
getch();
```

```
B
```

ANSWER

Output:

length of a = 5 and length of b = 6

B4FOR COPYNG:
a = First and b = Second

AFTER COPYNG:

a = Second and b = First

(concatenation of b and a = FirstSecond)

strcmp(a,b) : 32

Outcome of strcat(b,a) = FirstSecond

Algorithm

Start

- 1) Include headerfile
- 2) Declare variables a, b and c
- 3) Assign values to a, b and c
- 4) Use string functions to get values
- 5) Display the values



Practical No - 7

Aim- Write a C program to store data of 10 book using a structure

```
#include <stdio.h>
void main()
{
    struct book
    {
        char name;
        float price;
        int pages;
    };
    struct book b1, b2, b3, b4, b5, b6, b7, b8, b9, b10;
    printf("Enter names, prices and no. of pages of 10 books");
    scanf("%c%lf%d", &b1.name, &b1.price, &b1.pages);
    scanf("%c%lf%d", &b2.name, &b2.price, &b2.pages);
    scanf("%c%lf%d", &b3.name, &b3.price, &b3.pages);
    scanf("%c%lf%d", &b4.name, &b4.price, &b4.pages);
    scanf("%c%lf%d", &b5.name, &b5.price, &b5.pages);
    scanf("%c%lf%d", &b6.name, &b6.price, &b6.pages);
    scanf("%c%lf%d", &b7.name, &b7.price, &b7.pages);
    scanf("%c%lf%d", &b8.name, &b8.price, &b8.pages);
    scanf("%c%lf%d", &b9.name, &b9.price, &b9.pages);
    scanf("%c%lf%d", &b10.name, &b10.price, &b10.pages);

    printf("Entered values:");
}
```

ACNRAK

Output

Enter part no, price and no of pages of 10 books A to Z

| | Part No. | Price | No. of Pages |
|---|----------|-------|--------------|
| B | 150 | 300 | |
| C | 100 | 350 | |
| D | 100 | 100 | |
| E | 100 | 350 | |
| F | 150 | 300 | |
| G | 100 | 100 | |
| H | 150 | 350 | |
| I | 100 | 300 | |
| J | 100 | 300 | |
| K | 150 | 100 | |

Entered

values A: 100 B: 350 C: 2

| | Part No. | Price | No. of Pages |
|---|----------|-------|--------------|
| B | 150 | 300 | |
| C | 100 | 350 | |
| D | 150 | 100 | |
| E | 100 | 350 | |
| F | 150 | 300 | |
| G | 100 | 100 | |
| H | 150 | 350 | |
| I | 100 | 300 | |
| J | 100 | 300 | |
| K | 150 | 100 | |

Algorithm
S.A.C

- 1) Take input
 - 2) Print and Assign char
 - 3) Stop output
- 11/10/2011 CIS Input



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```
printf ("%C %f %od", bi.name, bi.price, bi.price, bi.pages);
printf ("%C %f %od", b2.name, b2.price, b2.pages);
printf ("%C %f %od", b3.name, b3.price, b3.pages);
printf ("%C %f %od", b4.name, b4.price, b4.pages);
printf ("%C %f %od", bs.name, bs.price, bs.pages);
printf ("%C %f %od", bc.name, bc.price, bc.pages);
printf ("%C %f %od", br.name, br.price, br.pages);
printf ("%C %f %od", bs.name, bs.price, bs.pages);
printf ("%C %f %od", ba.name, ba.price, ba.pages);
printf ("%C %f %od", bio.name, bio.price, bio.pages));
```

getch();