

* Control Structure:-

Control structure is a way which defines which statement will execute after which statement depend upon condition.

There are two types:-

- i) Branching / Branch Control Statement / Decision Control Statement / Conditional Branching Statement.
- ii) Looping / Loop Control Statement / Looping Statement / Iterative Statement
- iii) Conditional Branching Statement :-

Conditional branching statement is a way which defines the statement will execute depend upon condition.

There are different types of branching:-

- a) if statement
- b) if - else statement
- c) if - else - if statement
- d) Nested if statement
- e) switch statement

a) if statement : if statement is a type of branching. It works depend upon condition. If condition is true then conditional statement will execute, if condition is false then no any conditional statement will execute.

Syntax : —

if (condition)

{ statements ;

{

Ex:-

if ($b > big$)

{
 big = b ;

{

B.1. WAP to find biggest between 2 no's.

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

{

```
int a, b, big;
```

```
clrscr();
```

```

printf("In enter the value of a & b");
scanf("%d%d", &a, &b);
big = a
{
    if (b > big)
        big = b;
}
printf("In big=%d", big);
getch();
}

```

*¹ Dry run :-

enter the value of a & b

9 4

big = 9

$4 > 9 \quad X$

big = 9

2. Dry run :-

enter the value of a & b

3 5

big = 3

$5 > 3$

big = 5

big = 5

O/P :-

enter the value of a & b

3 5

big = 5

Q.2. WAP to find smallest between 2 no's.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int a, b, small;
    clrscr();
    printf("Enter the value of a & b");
    scanf("%d %d", &a, &b);
    small = a;
    if (b < small)
    {
        small = b;
    }
    printf("The small = %d", small);
    getch();
}
```



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Q.3 WAP to find the biggest between 3 no's.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int a, b, c, big;
    clrscr();
    printf ("In enter the value of a, b & c");
    scanf ("%d %d %d", &a, &b, &c);
    big = a;
    if (b > big)
    {
        big = b;
    }
    if (c > big)
    {
        big = c;
    }
    printf ("In big = %.d", big);
    getch();
}
```

Q4. WAP to find the smallest between 4 no's.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int a, b, c, d, small;
    clrscr();
    printf("In enter the value of a, b, c & d");
    scanf("%d %d %d %d", &a, &b, &c, &d);
    small = a;
    if (b < small)
    {
        small = b;
    }
    if (c < small)
    {
        small = c;
    }
    if (d < small)
    {
        small = d;
    }
    printf("In small = %d, small");
    getch();
}
```



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Q5.

Write a program to convert the fahrenheit to celsius. $c = 5/9 \times F - 32$

```
#include <stdio.h>
#include <conio.h>
void main()
{
    float c, f;
    printf ("\n Write the value of F");
    scanf ("%f", &F);
    c = (5.0/9.0) * (F-32);
    printf ("c=%f", c);
    getch();
}
```

b) if-else statement :- if-else statement is a type of branch control statement. In this, if condition is true then statement of "if" part will execute and if condition is false then "else" part will execute.

Syntax:-

```
if (cond)
{
```

statement

```
}
```

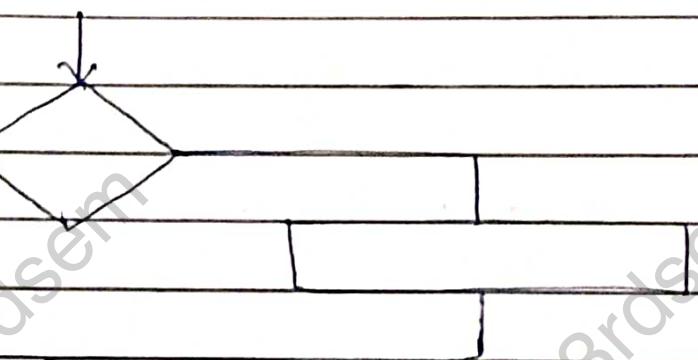
else

```
{
    statement;
}
```

Ex:- if ($a > b$)

```
{
    printf ("a is big");
}
else
{
    printf ("b is big");
}
```

* Flowchart :-



- Q. 1. WAP to find smallest b/w 2 no's.
- Q. 2. WAP to find greatest b/w 2 no's.
- Q. 3. WAP to check given no. is even or odd.
- Q. 4. WAP to check given no. is divisible by 9 or not.



Ans 1. →

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int a, b;
    clrscr();
    printf ("In enter any 2 no's.");
    scanf ("%d %d", &a, &b);
    if (a < b)
    {
        printf ("In %d is small", a);
    }
    else
    {
        printf ("In %d is small", b);
    }
    getch();
}
```

Ans 2. →

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int a, b;
    clrscr();
    printf ("In Enter the value of a, b");
    scanf ("%d %d", &a, &b);
```

```
if (a>b)
{
    printf ("%d is big", a);
}
else
    printf ("%d is big", b);
getch();
```

2.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int a;
    clrscr();
    printf ("Enter the value of a");
    scanf ("%d", &a);
    if (a%2 == 0)
    {
        printf ("%d is even", a);
    }
    else
        printf ("%d is odd", a);
    getch();
```



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```
1. #include <stdio.h>
#include <conio.h>
void main()
{
    int a;
    clrscr();
    printf ("In Enter the value of a");
    scanf ("%d", &a)
    if (a % 9 == 0)
    {
        printf ("%d is divisible by 9", a);
    }
    else
        printf ("%d is not divisible by 9");
    getch();
}
```

④ Nested if statement

Nested if statement is a type of branch control statement, a if statement comes within the another if statement is called nested - if statement.



Syntax :-

if (condition)
{ }

if (condition)
{ }

statements ;
{ }

statements ;
{ }

② Nested if - else statement :-

Syntax :-

if (cond")
{ }

if (cond")
{ }

statements ;
{ }

else

{ }

statement ;
{ }

}

else

{ }

if (cond")

```
{  
    statements ;  
}  
else  
{  
    statements ;  
}
```

③ Ladder if statement:-

Syntax:-

```
if (condn)  
{  
    if (condn)  
    {  
        if (condn)  
        {  
            if (condn)  
            {  
                statements ;  
            }  
        }  
    }  
}
```

iii) if - else - if statement :-

if - else - if statement is a type of branch control statement. A if statement written with the else statement of any if statement, this is called if - else - if statement.

① Syntax :-

```
if (cond")  
{
```

```
    statements ;  
}
```

```
else if (cond");  
{
```

```
    statements ;  
}
```

② Syntax :-

```
if (cond")  
{
```

```
    statement ;  
}
```

```
else  
{
```

```
    if (cond")  
{
```

```
        statements ;  
    }
```

```
}
```

Example:-

Q. WAP to find biggest between 3 no's.

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

```
#include <conio.h>
```

```
void main()
```

```
{
```

```
    int a, b, c;
```

```
    clrscr();
```

```
    printf("In enter any 3 no's");
```

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

```
    if (a > b)
```

```
{
```

```
    if (a > c)
```

```
        printf("In %d is big", a);
```

```
    else
```

```
        printf("In %d is big", c);
```

```
}
```

```
else
```

```
{
```

```
    if (b > c)
```

```
        printf("In %d is big", b);
```

```
    else
```

```
        printf("In %d is big", c);
```

```
}
```

```
getch();
```

```
}
```



Q. WAP to find smallest b/w 3 no's.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int a, b, c;
    clrscr();
    printf ("In Enter any 3 no's");
    scanf ("%d %d %d, &a, &b, &c);
    if (a < b)
    {
        if (a < c)
            printf ("In %d is small", a);
        else
            printf ("In %d is small", b);
    }
    else
    {
        if (b < c)
            printf ("In %d is small", b);
        else
            printf ("In %d is small", c);
    }
    getch();
}
```

Q. WAP to check given no. is divisible by 5 & 9 or not.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int n
    clrscr();
    printf ("In Enter the value of n");
    scanf ("%d", &n);
    if (n % 5 == 0)
    {
        if (n % 9 == 0)
            printf ("In %d is divisible by 5 and 9 both", n);
        else
            printf ("In %d is divisible by 5 but not 9", n);
    }
    else
    {
        if (n % 9 == 0)
            printf ("In %d is divisible by 9 but not 5", n);
        else
            printf ("In %d is not divisible by 5 and 9 both", n);
    }
    getch();
```

IV) Switch statement:-

Switch statement is a type of branch control statement in which more than one case exist and only one case execute depending upon choice.

Switch variable is always integers or character. There are 256 cases that exist in the switch statement of C lang.

Syntax:-

```
switch (statement)  
{
```

```
    case <label>: statements;  
        break;
```

```
    case <label>: statements;  
        break;
```

```
    case <label>: statements;  
        break;
```

```
    default: statement;
```

Q. WAP for calculator.

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

```
#include <conio.h>
```

```
void main()
```

```
{
```

```
    int n, a, b, c;
```

```
clrscr();
printf ("In Press 1 for addition In 2 for
subtraction In 3 for multiplication");
printf ("In Enter your choice");
scanf ("%d", &n);
switch (n)
```

```
{
```

case 1. printf ("In Enter two no.");
scanf ("%d %d", &a, &b);
c = a + b
printf ("In sum= %d", c);
break;

case 2. printf ("In Enter two no.");
scanf ("%d %d", &a, &b);
c = a - b
printf ("In sub= %d", c);
break;

case 3 printf ("In Enter two no.");
scanf ("%d %d", &a, &b);
c = a * b
printf ("In mul= %d", c);
break;

default: printf ("In entered key does not
found, Thank You");

```
}
```

```
getch();
```



Q. WAP to find the root of quadratic equation.

```
#include < stdio.h >
#include < conio.h >
void main()
{
    float a, b, c, x1, x2;
    clrscr();
    printf("In Enter the value of a, b, c");
    scanf("%f %f %f", &a, &b, &c);
    d = b * b - 4 * a * c;
    if (d > 0)
    {
        printf("In root will be real and unequal");
        x1 = (-b - pow(d, 0.5)) / (2 * a);
        x2 = (-b + pow(d, 0.5)) / (2 * a);
        printf("In x1=%f In x2=%f", x1, x2);
    }
    else
    if (d == 0)
        printf("In root will be real and equal");
        x1 = -b / (2 * a);
        x2 = -b / (2 * a);
        printf("In x1=%f In x2=%f", x1, x2);
    }
}
```

```
printf ("In root will be imaginary");
getch();
```

Q. WAP to find the value of y using switch statement.

$$① \quad y = \begin{cases} n+x, & \text{if } n=1 \\ n^2+x^2, & \text{if } n=2 \\ nx, & \text{if } n>2 \text{ and } n<1 \end{cases}$$

$$② \quad y = \begin{cases} 1+x, & \text{if } n=1 \\ n^2x, & \text{if } n=2 \\ n+x, & \text{if } n>2 \text{ and } n<1 \end{cases}$$

→ ①

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

```
#include <conio.h>
```

```
void main()
```

```
{
```

```
int x, y, n;
```

```
clrscr();
```

```
printf ("In Press 1 for n+x In 2 for  $n^2+x^2$   
In 3 any key for nx");
```

```
printf ("Enter your choice");
```

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

```
switch (n)
```

```
{
```

case 1: printf ("In Enter the value of x");

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

$$y = n+x;$$

```
    printf("y = %.d", y);  
    break;
```

Case 2 : printf ("enter the value of x");
scanf ("%d", & n);
 $y = (n \times n) + (x \times x);$
printf ("y = %.d", y);
break;

default : printf ("In enter the value of x");
scanf ("%d", & x);
 $y = n \times x$
printf ("y = %.d", y);
}

} getch();

}

②

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

```
#include <conio.h>
```

```
void main()
```

```
{
```

```
int x, y, n;
```

```
clrscr();
```

```
printf ("In Press 1 for  $1+x$  In 2 for  $n^2x$   
In any key for  $n+9$ ");
```

```
printf ("enter your choice");
```

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

```
switch (n)
```

```
{
```



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Case 1 : printf ("In enter the value of x");

scanf ("%d", &x);

y = 1 + x;

printf ("y = %d; y");
break;

Case 2 : printf ("In enter the value of x");

scanf ("%d", &x);

y = (n+x) * x;

printf ("y = %d", y);
break;

default : y = n + 9

printf ("y = %d", y);

getch();

}

Looping :-

- ① For loop
- ② While loop
- ③ Do while loop

For loop :— It is a type of loop. It is a top tested loop. This loop is used for counting purpose. This is the most usable loop. This loop is available in two ways first is in increment order and second is in decrement order.

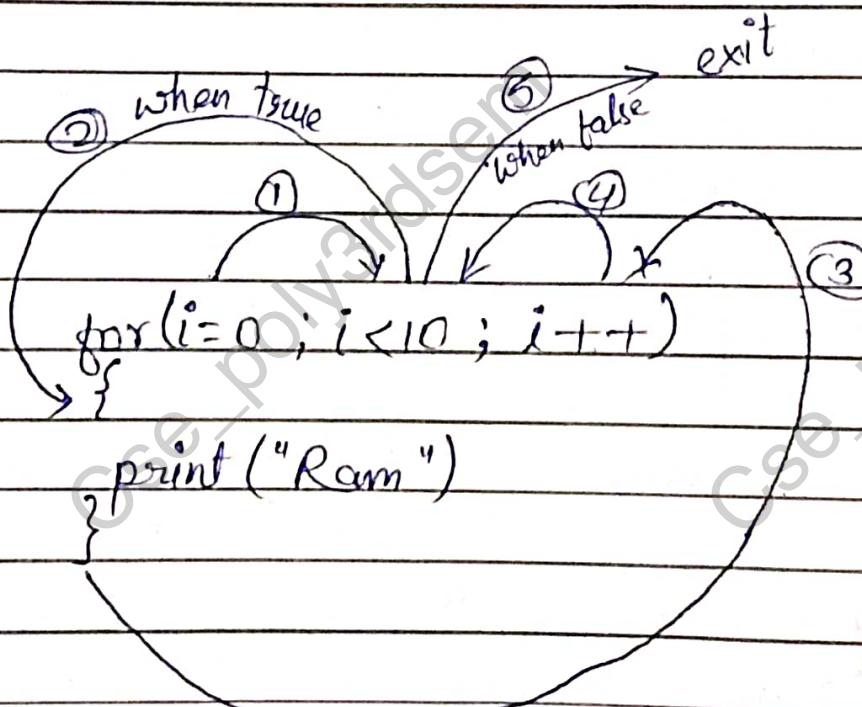
Syntax: —

```
for (initialization; condition; increment/decrement)
{
    Statements;
}
```

Ex: —

```
for (i=0; i<10; i++)
{
    print ("Ram")
}
```

```
for (i=0; i<10; i++)
{
    print ("Ram");
}
```



Q. WAP to print your name n times.

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

```
#include <conio.h>
```

```
void main()
```

```
{ int n, i;
```

```
clrscr();
```

```
printf ("In Enter the value of n");
```

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

```
for (i=0, i<n; i++)
```

```
{ print ("Surabhi") }
```

```
} getch();
```

Q. WAP to find the factorial of any given no.

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

```
#include <conio.h>
```

```
void main()
```

```
{
```

```
int n, fact=1;
```

```
clrscr();
```

```
printf ("Enter the value of n");
```

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

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

} fact = fact * i;

printf("n factorial of %d = %d", n, fact)
getch();

Dry run:-

Enter the value of n

4

i = 1 to 4

i = 1

$$\begin{aligned} \text{fact} &= \text{fact} * i \\ &= 1 * 1 = 1 \end{aligned}$$

i = 2

$$1 * 2 = 2$$

i = 3

$$2 * 3 = 6$$

i = 4

$$6 * 4 = 24$$

i = 5

factorial of 4 = 24.

- Q. WAP to find the sum of given series:
(a) $1+2+3+4+\dots$ upto n terms.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int n, i, sum=0;
    printf ("Enter the value of n");
    scanf ("%d", &n);
    for (i=1; i<=n; i++)
        sum = sum + i;
    printf ("sum of the series = %d", sum);
    getch();
}
```

Dry run:-

Enter the value of n

5

i = 1 to 5

i = 1

$$\text{sum} = 0 + 1 = 1$$

i = 2

$$\text{sum} = 1 + 2 = 3$$

i = 3

$$\text{sum} = 3 + 3 = 6$$

i = 4

$$\text{sum} = 6 + 4 = 10$$



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$$i = 5$$

$$\text{sum} = 10 + 5 = 15$$

$$i = 6 \quad x$$

$$\text{sum} = 15$$

(b)

~~1+3+5+7...~~ upto n terms.

#include <stdio.h>

#include <conio.h>

void main()

{

int i, sum = 0, x = 1;

clrscr();

printf("In Enter the value of n");

scanf("%d", &n);

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

{

sum = sum + x;

x = x + 1;

{

printf("In sum = %d", sum);

getch();

{



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(2) $2+4+6+8+\dots$ upto n terms.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int n, i;
    float fact = 1, sum = 0;
    clrscr();
    printf("In Enter the value of n");
    scanf("%d", &n);
    for (i = 1; i <= n; i++)
    {
        for (j = 1; j <= i; j++)
            fact = fact * j;
        sum = sum + i / fact;
        fact = 1;
    }
    printf("In sum=%f", fact);
    getch();
}
```

(3) $1 + \frac{2}{2} + \frac{3}{3} + \frac{4}{4} + \dots$ upto n terms.

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



```
{  
    int n, i, sum = 0, fact = 1;  
    float fact = 1, sum = 0;  
    printf ("Enter the value of n");  
    scanf ("%d", &n);  
    for (i=1; i<=n; i++) {  
        for (j=1, j<=i, j++) {  
            fact = fact * i;  
            sum = sum + i / fact;  
        }  
        fact = 1;  
    }  
    printf ("In sum = %.f", fact);  
    getch();  
}
```

* While loop:- While loop is a top tested loop. It is very most usable loop. This loop can be used for any type of looping problem.

Syntax:-

```
while (cond)  
{  
    statements;  
}
```



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Examples:-

```
while (n>0)
{
```

```
    d = n % 10;
```

```
    rev = rev * 10 + d;
```

```
    n = n / 10;
}
```

Note:- When cond" is true, then statement of while loop will execute. or if cond" is false then no any statement will execute.

Q. WAP to find reverse number of any given no.

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

```
#include <conio.h>
```

```
void main()
```

```
{
```

```
    int n, d, rev = 0;
```

```
    clrscr();
```

```
    printf ("In Enter the value of n");
```

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

```
    while (n>0)
```

```
{
```

```
    d = n % 10;
```

```
    rev = rev * 10 + d;
```

```
    n = n / 10;
```

```
    }  
    printf ("In rev = %.d", rev);  
    getch();  
}
```

B. WAP to check given no. is palindrom or not.

```
#include <stdio.h>  
#include <conio.h>  
void main()  
{  
    int n, d, rev = 0, m;  
    clrscr();  
    printf ("Enter the value of n");  
    scanf ("%d", &n);  
    m = n;  
    while (n > 0)  
    {  
        d = n % 10;  
        rev = rev * 10 + d;  
        n = n / 10;  
    }  
    if (m == rev)  
        printf ("Given no. is palindrom");  
    else  
        printf ("Given no. is not palindrom");  
    getch();  
}
```



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Q. WAP to check given no. is armstrong or not.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int n, d, sum = 0, m;
    clrscr();
    printf ("In Enter the value of n");
    scanf ("%d", &n);
    m = n;
    while (n > 0)
    {
        d = n % 10
        sum = sum + d * d * d
        n = n / 10
    }
    if (m == sum)
        printf ("In Given no. is armstrong")
    else
        printf ("In given no. is armstrong")
    getch();
}
```

* Do-while loop:- Do-while loop is a bottom tested loop. In this loop if condition is false then statement of do-while loop will execute atleast one time.

Syntax:-

```
do
{
    statements;
}
while (condition);
```

Ex- (i)

```
do
{
    d = n % 10;
    rev = rev * 10 + d;
    n = n / 10;
}
while (n > 0);
```

(ii)

```
i = 0;
sum = 0;
do
{
    sum = sum + i;
}
while (i <= n);
```

Q. Write a program to find the ~~sum~~ ^{sum} of given series - 1 + 2 + 3 + ... upto n term.

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

```
#include <conio.h>
```

```
void main()
```

```
int i=1, sum=0, n;  
clrscr();  
printf ("In enter the value of n");  
scanf ("%d", &n);  
do  
{  
    sum = sum + i;  
    i++;  
}  
while (i <= n);  
printf ("In sum = %d", sum);  
getch();  
}
```

Break statement:- The break is a keyword in 'C' language which is used to bring the program control out of the loop. The break statement loop is used inside the loop or switch statement. The break statement breaks the loop one by one i.e., in the case of nested loop. It breaks the inner loop first and then proceeds the outer loop.

Syntax :-

```
break;
```



Ex:-

```
#include <stdio.h>
void main()
{
    int i;
    for (i=0; i<10; i++)
    {
        printf ("%d", i);
        if (i == 5)
            break;
    }
    printf ("I'm come outside of loop i=%d", i);
```

VVI
→

Continue statement:- The continue statement in 'C' programming works to send the compiler to the starting of the program. Sometime, it works like the loop.

Syntax:-

```
continue;
```

Ex:-

```
#include <stdio.h>
void main()
{
    int a = 10;
    do
```

```

{ int a if (a == 15)
    {
        a++;
        continue;
    }
    printf ("value of a : %d", a);
    a++;
}
while (0 < 20)
{
    getch();
}

```

* Go to statement:- Go to statement is a jump statement. It is also known as unconditional jump statement in the 'C' language. The go to statement can be used to jumps from anywhere to anywhere within a function.

Syntax:-

i) go to label:	ii) label:
_____	_____

Label:

go to label;

Ex:- WAP to check given no. is even or odd.

```
#include <cs50.h>
int main()
{
    int x = 15;
    clrscr();
    if (x % 2 == 0)
        go to even;
    else
        goto odd;
    even: printf("In %d is even no.", x);
    return;
    odd: printf("In %d is odd no.", x);
    return;
    getch();
}
```

V.V.I.

* Nested for loop :- Nested for loop is a type of for loop. In this a for loop comes/written within the another loop is called nested for loop.

Syntax:-

```
for (initialization; cond"; increment/decrement)
```



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```
for (initialization; cond"; increment/decrement)
```

```
{ statement;
```

```
} statement;
```

Ex: —

```
for (i=0; i<5; i++)
```

```
{ for (j=0; j<=i; j++)
```

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

```
}
```

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

B. WAP to print

```
*  
* * *  
* * * *  
* * * * *
```

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

```
# include < conio.h >
```

```
void main()
```

```
{
```

```
clrscr();
```

```
int i, j, n;
```

```
printf ("In enter the value of n");
```



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```
scanf ("%d", &n);
for (i=0; i<n; i++)
{
    for (j=0; j<=i; j++)
        printf ("*");
    printf ("\n");
}
getch();
```

Q. WAP to print ~~*****~~

```
#include <stdio.h>
#include <conio.h>
void main()
{
    clrscr();
    int n, i, j, k;
    printf ("In enter the value of n");
    scanf ("%d", &n);
    for (i=1; i<=n; i++)
    {
        for (j=1; j<=n-i; j++)
            printf ("%*");
```

```
for (k=1; k<=9 * i-1; k++)  
{  
    printf ("x");  
}  
printf ("\n");  
getch();  
}
```

8. WAP to print


```
#include <stdio.h>  
#include <conio.h>  
void main()  
{  
    int n, i, j, k;  
    clrscr();  
    printf ("In enter the value of n");  
    scanf ("%d", &n);  
    for (i=1; i<=n; i++)  
    {  
        for (j=1; j<=n-i; j++)  
            printf (" ");  
        for (k=1; k<=n; k++)  
            printf ("x");  
        printf ("\n");  
    }  
    getch();  
}
```

B. WAP to print

1
1 2
1 2 3
1 2 3 4

```
#include <stdio.h>
#include <conio.h>
void main()
{
    clrscr();
    int n, i, j;
    printf ("Please enter the value of n");
    scanf ("%d", &n);
    for (i=1; i<=n; i++)
    {
        for (j=1; j<=i; j++)
            printf ("%d", j);
        printf ("\n");
    }
    getch();
}
```

Q. WAP to print

1
2 2

3 3 3

4 4 4 4

5 5 5 5 5

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int i, j, p, q;
    q = 1;
    printf ("Enter a number you want to print");
    scanf ("%d", &p);
    for (i = 1; i <= p; ++i)
    {
        for (j = 1; j <= i; ++j)
        {
            printf ("%d", q);
            q++;
        }
        printf ("\n");
    }
    getch();
}
```



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Q. WAP to print

1 2 3 4 5
1 2 3 4
1 2 3
1 2
1

```
#include <stdio.h>
#include <conio.h>
void main()
{
    clrscr();
    int i, j, n;
    printf ("Pls enter the value of n");
    scanf ("%d", &n);
    for (i=n; i>=1; i--)
    {
        for (j=1; j<=i; j++)
            printf ("%d", j);
        printf ("\n");
    }
    getch();
}
```

Q. WAP to print

* * *
* * * *
* * * *

```
#include <iostream.h>
#include <conio.h>
void main()
{
    clrscr();
    int n, i, j, k;
    printf ("In enter the value of n");
    scanf ("%d" & n);
    for (i=1; i<=n; i++)
    {
        for(j=1; j<=n-i; j++);
        printf (" ");
        for(k=1; k<=i; k++);
        printf ("*");
        printf ("\n");
    }
    getch();
```

Q. WAP to print

1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

```
#include <stdio.h>
#include <conio.h>
void main()
{
    clrscr();
    int n, i, j, k;
    printf ("In enter the value of n");
    scanf ("%d", &n);
    for (i = 1; i <= n; i++) {
        for (j = 1; j <= n - i; j++)
            printf (" ");
        for (k = 1, k <= i; k++)
            printf ("%d", k);
        printf ("\n");
    }
    getch();
}
```

Q. WAP to print 5 4 3 2 1
5 4 3 2
5 4 3
5 4
5

```
#include <stdio.h>
#include <conio.h>
void main()
{
    clrscr();
    int n, i, j;
    printf ("In enter the value of n");
    scanf ("%d", &n);
    for (i=1; i<=n; i++)
    {
        for (j=n; j>=i; j--)
        {
            printf ("%d", j);
        }
        printf ("\n");
    }
    getch();
}
```