

Write a Program to display Hello world.

//The program show hello world

```
#include<stdio.h>
main()
{
    printf("Hello World");
}
```

Output :

Hello World

Write a program to display your name and age.

// This program shows my name and age.

```
#include<stdio.h>
main()
{
    printf("My name is Bikram Gyawali.\n");
    printf("I am 18 year old.");
}
```

Output : My name is Bikram Gyawali.
I am 18 year old.

WAP to produce following pattern.

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

// The program is showing the pattern

```
#include <stdio.h>
main () {
    printf (" * * * *\n");
    printf (" * * *\n");
    printf (" * *\n");
    printf (" * ");
}
```

Output :

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



WAP to add any two number

// Program to find the sum

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

```
main() {
```

```
    int a = 5;
```

```
    int b = 5;
```

```
    int s ;
```

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

```
    printf (" Sum of 5 and 5 is %d," sum);
```

```
    }
```

Output:

Sum of 5 and 5 is 10.

WAP to subtract, multiply and divide any two number.

// Program to subtract, multiply and divide two whole number.

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

```
main() {
```

```
    int a, b, S, m, d;
```

```
    a = 10;
```

```
    b = 5;
```

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

```
    m = a * b;
```

```
    d = a / b;
```

```
    printf (" Subtraction is %d \n", S);
```

```
    printf (" multiplication is %d \n", m);
```

```
    printf (" division is %d \n", d);
```

WAP to calculate the simple interest.

// This program is for calculating interest

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

```
main()
```

```
{ float P, t, r, si;
```

```
P = 4000;
```

```
r = 2.2;
```

```
t = 2;
```

```
si = (P * t * r) / 100;
```

```
printf("The simple interest is %f, si);
```

```
}
```

Output :

The simple interest is 176

WAP to find the cube of a number taken from user.

//This program is to find a cube of number

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

```
main()
```

```
{
```

```
int a, cube;
```

```
printf("Give a number %d", a);
```

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

```
cube = a * a * a;
```

```
printf("The cube of the number is %d", cube);
```

```
}
```

Output :

Give a number : 2

The cube of the number is 8

Question: B

// Program to calculate volume of a
Sphere

```
#include <stdio.h>
main() {
    float r, v, pi;
    pi = 3.14;
    printf("Enter the Radius : ", r);
    scanf("%f", &r);
    v = (4/3) * pi * (r * r * r);
    printf("The volume of a sphere : %.2f",
           v);
}
```

Output:

Enter the Radius : 2

The volume of a sphere : 33.08

Q) WAP that prints the perimeter of a rectangle using its height and width as inputs.
// Program to calculate perimeter of a rectangle using height and width

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

```
main() {
```

```
    float h, w, p;
```

```
    printf("Enter the Height : ", h);
```

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

```
    printf("Enter the Width : ", w);
```

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

```
    P = 2 * (h + w);
```

```
    printf("The perimeter of a rectangle : %f", p);
```

```
}
```

Output :

Enter the Height : 2.3

Enter the Width : 3.2

The perimeter of a rectangle : 11

WAP to converts kilometer per hour to miles per hour.

//Program to calculate kilometer per hour to miles per hour.

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

```
float kph, c, mph;
```

```
c = 0.62137119;
```

```
printf ("Enter the kilometer per hours:", kph);
```

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

```
mph = kph * c;
```

```
printf ("Miles per hour : %.2f", mph);
```

```
g
```

Output :

Enter the kilometer per hour: 134

Miles per hour: 83.26

2. WAP which takes hours and minute as input and calculate the total hour.

//Program to calculate total number of minute.

```
#include <stdio.h>
main()
{
    int h, c, m;
    printf("Enter the hours : ", h);
    scanf("%d", &h);
    printf("Enter the minute : ", m);
    scanf("%d", &m);
    c = (h * 60) + m;
    printf("Total number of Minute : %d", c);
}
```

Output :

```
Enter the hours : 2
Enter the minute : 30
Total number of Minute : 150
```

13. WAP to calculate the third angle

// For Third Angle

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

```
main () {
```

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

```
    t = 180;
```

```
    printf ("Enter the First Angle : ");
```

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

```
    printf ("Enter the Second Angle : ");
```

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

```
    c = t - (a + b);
```

```
    printf ("The Third Angle is %d ", c);
```

```
}
```

Output:

Enter the first Angle : 40

Enter the Second Angle : 40

The Third Angle is 100

QN. 14

Write a program to sum integer from 1000 to 2000

```
#include <stdio.h>
main () {
    int i, s=0;
    for ( i=1000; i<=2000; i++) {
        s+=i;
    }
    printf ("The sum is %d", s);
}
```

Output :

The sum is 1501500

Q N 15

WAP to find the even number from 0 to 5.

```
#include <stdio.h>
main () {
    int i, r;
    for (i=0; i<=5; i++) {
        r = (i%2 == 0)? printf ("%d", i): printf
        ("\n");
    }
}
```

Output:

0

2

4

Q.N 16

WAP to find the odd number
From 0 to 5

```
# include <stdio.h>
main () {
    int i;
    for (i = 0; i <= 5; i++) {
        if (i % 2 != 0) {
            printf ("%d", i);
        }
    }
    else {
        printf ("\n");
    }
}
```

Output : 1

3

5

7. WAP to find the number odd or even.

// Program to find the number odd or even

```
#include <stdio.h>
main () {
    int n;
    printf ("Enter the number:");
    scanf ("%d", &n);
    If (n % 2 == 0) {
        printf ("The number is even");
    }
    else {
        printf ("The number is odd");
    }
}
```

Output:

Enter the number : 2

The number is even

18. Write a Program to Swap two number without using third variable

// Swapping the value

```
#include<stdio.h>
main()
{
    int a, b;
    printf("Enter the First number:");
    scanf("%d", &a);
    printf("Enter the Second number:");
    scanf("%d", &b);
    a = a + b;
    b = a - b;
    a = a - b;
    printf("After Swapping a=%d and
           b=%d\n", a, b);
}
```

Output

Enter the first number : 5

Enter the second number : 6

After the Swapping a= 6 and b= 5

19. WAP to find greatest among two number using Conditional Operator

// Finding the greatest number

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

```
main () {
```

```
    int a, b, l;
```

```
    printf ("Enter The First Numbers : ");
```

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

```
    printf ("Enter The Second Numbers : ");
```

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

```
    l = (a > b) ? a : b;
```

```
    printf ("The Largest Number is %d \n", l);
```

```
}
```

Output

```
Enter The First Numbers : 10
```

```
Enter The Second Numbers : 15
```

```
The largest Number is 15.
```

Q. WAP to find whether a person is eligible to vote or not.

```
#include <stdio.h>
main () {
    int age;
    printf ("Enter the age of a person : ");
    scanf ("%d", &age);
    if (age >= 18) {
        printf ("You can vote");
    }
    else {
        printf ("You can't vote");
    }
}
```

Output:

```
Enter the age of a person : 19
You can vote
```

While - loop

1. WAP to get the sum from 1 to 10.

// Using while - loop

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

```
main () {
```

```
    int i = 1, sum = 0
```

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

```
        sum + i;
```

```
        i++
```

```
    }
```

```
    printf (" Sum of Numbers : %d ", sum);
```

```
}
```

Output:

Sum of Numbers : 55

Q. WAP to find the Factorial of a given number by user.

//Finding Factorial

```
#include <stdio.h>
main () {
    int i=1, n, factorial=1;
    printf ("Enter the Number : ");
    scanf ("%d", &n);
    while (i<=n) {
        factorial *= i;
        i++;
    }
    printf ("The Factorial of %d is %d", factorial)
```

Output:

Enter the Number : 3

The Factorial of 3 is 6.

3. WAP to check if a given number is Palindrome or not.

```
#include <stdio.h>
main () {
    int n, rev=0, org, rem;
    printf ("Enter a number : ");
    scanf ("%d", &n);
    org = n;
    while (n != 0) {
        rem = n % 10;
        rev = rev * 10 + rem;
        n /= 10;
    }
    (org == rev)? printf ("%d is Palindrome", org):
    printf ("%d is not Palindrome, org");
}
```

Output:

Enter a number : 121

121 is Palindrome

Do - While Loop

WAP to print "Hello Word" For 5 times using do-while loop.

// 5 times Hello World

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

```
main () {
```

```
    int i = 1;
```

```
do {
```

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

```
    i++;
```

```
} while (i <= 5);
```

```
}
```

Output:

Hello World

Hello World

Hello World

Hello World

Hello World

WAP to Take input of 10 integer and calculate the average value input.

// Average of 10 Numbers

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

```
main()
```

```
{ int i, n[10], sum = 0;
```

```
float avg;
```

```
for (i=0; i<10; i++) {
```

```
    printf ("Enter the Number %d", i+1);
```

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

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

```
    avg = sum / 10;
```

```
}
```

```
printf ("The Average of the 10 integer is  
% .2f", avg);
```

```
}
```

Output :

Enter the Number 1 : 2

Enter the Number 2 : 4

Enter the Number 3 : 2

Enter the Number 4 : 4

Enter the Number 5 : 5

Enter the Number 6 : 7

Enter the Number 7 : 9

Enter the Number 8 : 10

Enter the Number 9 : 12

Enter the Number 10 : 10

The Average of the 10 integer is 6.5

WAP to create a multiplication table
of 1 from 1 to 5.

//Multiplication table of 1 from 1 to 5

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

```
main() {
```

```
    int i;
```

```
    for(i=1;i<=5;i++) {
```

```
        printf("1 * %d = %d\n", i, 1 * i);
```

```
}
```

```
}
```

Output :

$$1 \times 1 = 1$$

$$1 \times 2 = 2$$

$$1 \times 3 = 3$$

$$1 \times 4 = 4$$

$$1 \times 5 = 5$$

WAP to find the multiplication table from 1 to 2.

// multiplication Table of 1 and 2.

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

```
main () {
```

```
    int i,j;
```

```
    for (i = 1; i <= 2; i++) {
```

```
        for (j = 1; j <= 10; j++) {
```

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

```
}
```

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

```
}
```

```
}
```

Output :

$$1 \times 1 = 1$$

$$1 \times 2 = 2$$

$$1 \times 3 = 3$$

$$1 \times 4 = 4$$

$$1 \times 5 = 5$$

$$1 \times 6 = 6$$

$$1 \times 7 = 7$$

$$1 \times 8 = 8$$

$$1 \times 9 = 9$$

$$1 \times 10 = 10$$

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

18. WAP to access marks of 5 subject and calculate the percentage.

//Percentage of 5 subject

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

```
main () {
```

```
    int i; n[4];
```

```
    float sum=0, per;
```

```
    for (i=1; i<=5; i++) {
```

```
        printf("Enter the mark of %d subject, %d", i+1);
```

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

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

```
        per = (sum/500) * 100;
```

```
    }
```

```
    printf("The percentage of 5 subject is  
          %.2f", per);
```

```
}
```

OUTPUT

Enter the mark of 1 subject 20

Enter the mark of 2 subject 30

Enter the mark of 3 subject 40

Enter the mark of 4 subject 50

Enter the mark of 5 subject 60

The percentage of 5 subject is 40.

WAP to find smallest and largest element in an array.

// Smallest and largest element in an array

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

```
    int i, n;
```

```
    printf ("Enter the Number of Elements :");
```

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

```
    int num[n];
```

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

```
        printf ("Enter the number %d : ", i+1);
```

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

```
}
```

```
    int s = num[0], l = num[0];
```

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

```
        if (num[i] < s) {
```

```
            s = num[i];
```

```
        } if (num[i] > l) { l = num[i];
```

```
}
```

```
}
```

Continue . . .

```
printf ("The smallest Number in the  
given array is %d", 6);
```

```
printf ("The Largest Number in the given  
array is %d", 1);
```

y

Output :

Enter the

Enter the

Enter the

Enter the

Number of Elements : 3
number 1 : 1

number 2 : 4

number 3 : 5

The smallest Number in the given array is 1.
The largest Number in the given array is 5.

WAP to find the sum of the series

$$1+x^2+3x^2+4x^2+\dots nx^2$$

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

```
main () {
```

```
    int i, n, s, x;
```

```
    printf ("Enter the value of x and N: \n");
```

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

```
    S = 1 + x * x;
```

```
    for (i = 3; i <= n; i = i + 1) {
```

```
        S = S + i * x * x;
```

```
}
```

```
    printf ("The Sum = %d", s);
```

```
}
```

Output:

Enter the value of x and N : 3

7

The Sum = 235

WAP to display the sum of the following series

$$\text{Sum} = x - x^2 + x^3 - x^4 + \dots$$

```
#include <stdio.h>
#include <conio.h>
#include <math.h>
main(){
    int x, n, sum = 0, i;
    printf("Enter the value of x and N : \n");
    scanf("%d %d", &x, &n);
    for(i=1; i<=n; i++){
        if(i%2 == 0){
            sum = sum - pow(x, i);
        }
        else{
            sum = sum + pow(x, i);
        }
    }
    printf("Sum = %d", sum);
}
```

Output : Enter the value of x and N : 7

$$\text{Sum} = 720601$$

WAP to find the sum of the sequence

$$\frac{1}{1!} + \frac{2}{2!} + \frac{3}{3!} + \frac{4}{4!} + \dots + \frac{n}{n!}$$

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

```
main () {
```

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

```
float sum = 0;
```

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

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

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

```
f = 1;
```

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

```
f = f * j;
```

```
sum = sum + (float) i / f;
```

```
}
```

```
printf ("Sum = %.f", sum);
```

```
}
```

Output:

Enter the Number : 10

Sum = 2.718282

WAP to display the number in ascending order.

```
#include <stdio.h>
main(){
    int temp, j, i, n;
    printf("Enter the Number : ");
    scanf("%d", &n);
    int num[n];
    for (i=0; i<n; i++){
        printf("Enter the %d Number : ", i+1);
        scanf("%d", &num[i]);
    }
    for (i=0; i<n; i++){
        for (j=i+1; j<n; j++){
            if (num[i] > num[j]){
                temp = num[i];
                num[i] = num[j];
                num[j] = temp;
            }
        }
    }
    printf("The ascending order of the given numbers : ");
    for (i=0; i<n; i++){
        printf("\n %d", num[i]);
    }
}
```

Output :

Enter the number : 5

Enter the 1 Number : 5

Enter the 2 Number : 4

Enter the 3 Number : 3

Enter the 4 Number : 2

Enter the 5 Number : 1

The ascending order of the given numbers:

1

2

3

4

5

Function

WAP to find the largest number among three numbers.

```
#include <stdio.h>
main()
{
    int a, b, c, d, result;
    printf ("\n Enter any three numbers : ");
    scanf ("%d %d %d", &a, &b, &c);
    d = greatest (a, b);
    result = greatest (c, d);
    printf ("\n The greatest number : %d", result);
}

greatest (x, y) {
    if (x > y)
        return x;
    else
        return y;
}
```

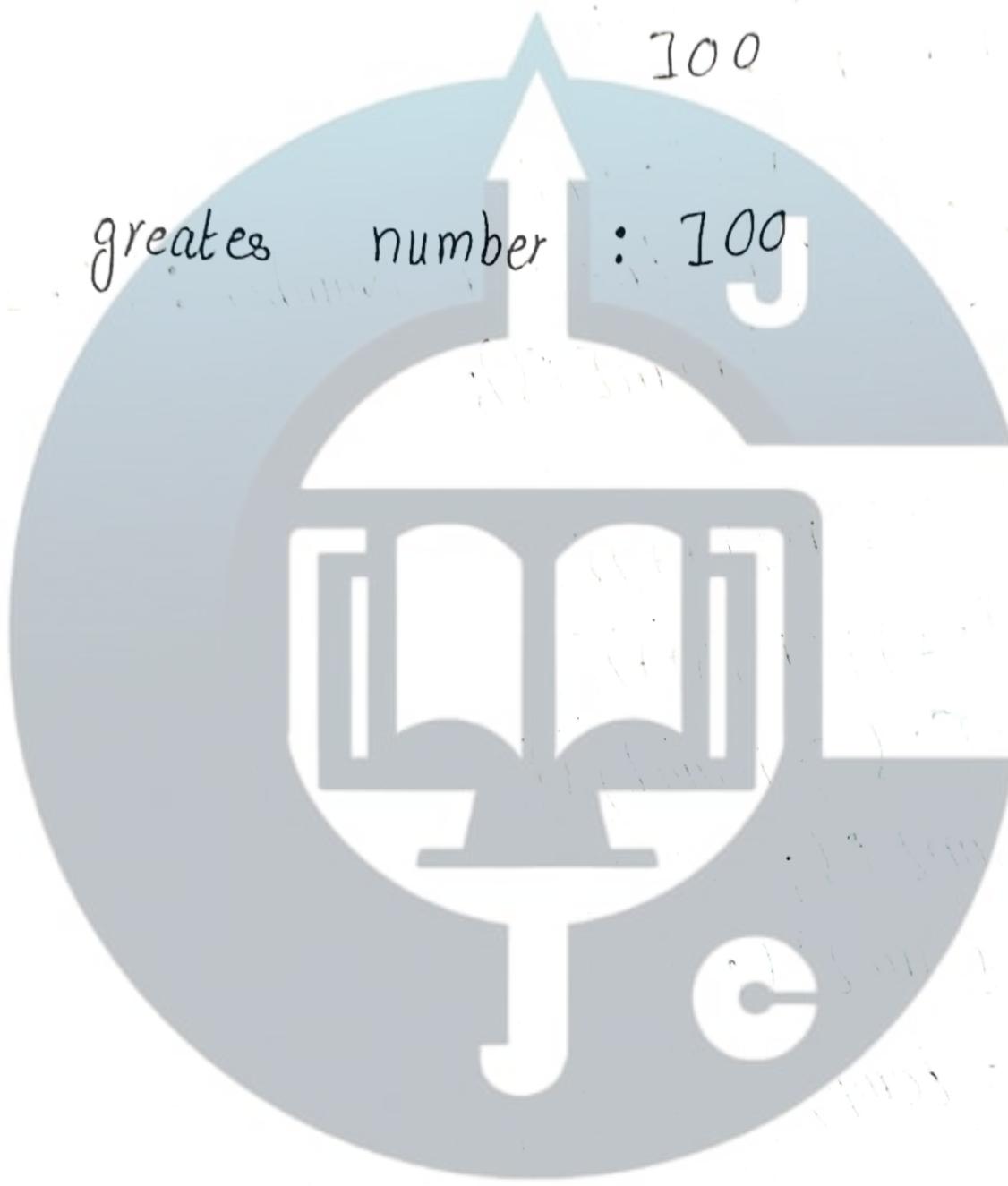
Output:

Enter any three number: 2

5

100

The greatest number : 100



WAP to find the factorial of a number.

```
#include <stdio.h>
main()
{
    int n, result;
    printf("Enter the number : ");
    scanf("%d", &n);
    result = Fact(n);
    printf("The Factorial of %d is %d\n", n, result);
}
Fact(a)
{
    int i, fact = 1;
    for(i=1; i<=a; i++)
    {
        fact = fact * i;
    }
    return fact;
}
```

Output: Enter the number : 3
The Factorial of 3 is 6

36. WAP to display the menu of a hotel using switch condition.

```
#include <stdio.h>
main() {
    int n,i;
    printf ("\n\n %30s welcome to Hotel Coders
    club \n\n Here the Menu with Items Numbers:
    \n\n", " ");
    printf ("1) momo\n");
    printf ("2) Noodles \n");
    printf ("3) Pizza \n");
    printf ("4) Burger \n");
    printf ("5) Samosa \n");
    printf ("\n Enter the Item Number of Food
    from 1 to 5: \t");
    scanf ("%d", &n);
    switch(n) {
        case 1:
            printf ("Your order is Momo ");
            break;
        case 2:
            printf ("Your order is Noodles ");
            break;
        case 3:
```

```
printf("Your order is Pizza");
break;
Case 4:
printf("Your order is Burger");
break;
Case 5:
printf("Your order is Samosa");
break;
default:
printf("Please Enter the item which is present
in the menu");
33
```

Output:

Welcome to Hotel Coders Club

Here the Menu with Items Numbers :

- 1) Momo
- 2) Noodles
- 3) Pizza
- 4) Burger

Enter the Item Number of Food from
1 to 5 : 5

Your order is Samosa

37) WAP to add first natural numbers
in recursive.

```
#include<stdio.h>
long sum (int);
main () {
    int i,n,x;
    printf("How many numbers:");
    scanf("%d",&n);
    x = sum(n);
    printf ("The sum of first %d numbers is
            %d",n,x);
}
long sum (int n){
    if (n == 0)
        return 0;
    else
        return (n + sum(n-1));
}
```

Output :

How many numbers : 5

The sum of first 5 number is 15

38) WAP to display the Fabonic series
in recursive

```
#include <stdio.h>
int f(int);
main()
{
    int i, n, x;
    printf("Enter the Number:");
    scanf("%d", &n);
    printf("The Fabonic Series up to %d
          :\n", n);
    for (i = 1; i <= n; i++)
    {
        x = f(i);
        printf("%d \t", x);
    }
}
int f(int n)
{
    if (n <= 0)
        return 0;
    else if (n == 1)
        return 1;
    else
        return (f(n-1) + f(n-2));
}
```

Output:

Enter the Number : 10

1 1 2 3 5 8 13 21 34 55

39. Find the factorial of a number in recursive.

```
#include <stdio.h>
long fact (int);
main(){
    int n;
    long r;
    printf ("Enter the Number :");
    scanf ("%d", &n);
    fact (n);
    r=fact (n);
    printf ("The Factorial of %d is %d", n, r);
}
long Fact (int n){
    if (n<=0)
        return 1;
    else
        return (n * fact (n-1));
}
```

Output:

Enter the Number : 5
The Factorial of 5 is 120.