## C language

```
1. print hello world
Code- #include<stdio.h>
  int main(){
  printf ("Hello world\n");
  return 0;
}
2. Program to print sum of n matural number.
Code- #include<stdio.h>
  int main(){
  int n, sum =0, num;
  printf ("Enter n\n");
  scanf ("%d", &n);
  for (int i = 0; i < n; i++)
     printf ("Enter your number\n");
     scanf ("%d", &num);
     sum = sum + num;
  printf ("Sum = %d\n", sum);
  return 0;
3. Program to print digit of entered number.
Code- #include<stdio.h>
  int main(){
  unsigned long long n;
  int digit=0;
  printf ("Enter number\n");
  scanf ("%llu", &n);
  while (n>0)
```

4. Program to reverse a no and check palindrome.

printf ("Number of digit is %d\n", digit);

Code- #include<stdio.h>

digit++; n = n/10;

return 0;

```
int main(){
int n, rev=0, rem;
printf ("Enter a number\n");
scanf ("%d", &n);
int temp = n;
while (n>0)
  rem = n\%10;
  rev = rem + rev*10;
  n = n/10;
printf ("Reverse of %d is %d\n", temp, rev);
if (temp == rev)
  printf ("Its a palindrome number\n");
else
{
  printf ("Not a palindrome number\n");
return 0;
```

5. Program to check palindrome number.

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

```
int main(){
int n, rem, arm=0;
printf ("Enter any 3 digit number\n");
scanf ("%d", &n);
int temp = n;
while (n>0)
{
    rem = n%10;
    arm = arm + rem*rem*rem;
    n = n/10;
}
if (arm == temp)
{
    printf ("Its a Armstrong number\n");
}
else
{
    printf ("Not a Armstrong number\n");
}
return 0;
```

6. Program to check a number is prime or not.

```
Code- #include<stdio.h>
  int main(){
  int n, count=0;
  printf ("Enter number to check wheather it is prime or not\n");
  scanf ("%d", &n);
  for (int i = 0; i < n/2; i++)
     if (n\%i = = 0)
       count++;
       break;
  if (count==0)
     printf ("Its a prime number\n");
  else
     printf ("Not a prime number\n");
  return 0;
7. Program to find factorial number.
Code-#include<stdio.h>
    int main(){
  int n, fact=1;
  printf ("Enter number\n");
  scanf ("%d", &n);
  for (int i = 1; i <=n; i++)
     fact = fact*i;
  printf ("Factorial of %d is %d\n", n, fact);
  return 0;
8. Program to print fibonacci series.
Code-#include<stdio.h>
```

```
int main(){
int n, a, b, temp;
printf ("Enter a number\n");
scanf ("%d", &n);
a = 0;
```

```
b = 1;
  printf ("%d\t%d\t", a, b);
  for (int i = 1; i \le n-2; i++)
     temp = b;
     b = a+b;
     a = temp;
     printf ("%d\t", b);
  return 0;
9. Program to print Even or odd number between a series.
Code-#include<stdio.h>
  int main(){
  int min, max;
  printf ("Enter starting and ending point\n");
  scanf ("%d %d", &min, &max);
  printf ("Even numbers are: \n");
  for (int i = min; i \le max; i++)
     if (i\%2==0)
       printf ("%d\t", i);
  printf ("\nOdd numbers are: \n");
  for (int i = min; i \le max; i++
     if (i%2!=0)
       printf ("%d\t", i);
  return 0;
10. Program to print in column number and their square and cube.
Code- #include < stdio.h >
  int main(){
  for (int i = 1; i \le 10; i++)
     printf ("%d\t%d\n", i, i*i, i*i*i);
  return 0;
```

11. Program to convert decimal to binary number.

```
Code:- #include<iostream>
#include<math.h>
using namespace std;
  int main(){
  int n;
  cout<<"Enter a decimal number: ";</pre>
  cin>>n;
  int ans =0;
  int i=0;
  while (n!=0)
     int bit = n\&1;
     ans += pow(10, i)*bit;
     n = n >> 1;
     i++;
   cout<<"Answer = "<<ans<<endl;</pre>
   return 0;
}
12. Program to convert binary to decimal.
Code:- #include<iostream>
#include<math.h>
using namespace std;
  int main(){
  int n;
  cout<<"Enter a binary number: ";</pre>
  cin>>n;
  int ans=0, i=0;
  while (n!=0)
     int digit = n\%10;
    if (digit == 1)
      ans += pow(2, i);
     n = 10;
    i++;
  cout<<ans<<endl;
  return 0;
}
```

