

# Assignment - 11 - C Language

①

Q1 Write a Program to calculate sum of first  $N$  natural numbers.

```
#include <stdio.h>
int main()
{
    int i=1, n, Sum=0;
    printf("Enter number");
    scanf("%d", &n);
    while(i<=n)
    {
        Sum = Sum + i;
        i++;
    }
    printf("Sum of %d natural number : %d", n, Sum);
    return 0;
}
```

Q2 Write a Program to Calculate sum of first  $N$  even natural numbers.

```
#include <stdio.h>
int main()
{
    int i=1, n, Sum=0;
    printf("Enter number");
    scanf("%d", &n);
    while(i<=n)
    {
Sum = Sum + i;
        Sum = Sum + 2*i;
        i++;
    }
    printf("Sum of %d even natural number : %d", n, Sum);
    return 0;
}
```

Q3 Write a Program to Calculate sum of first  $N$  odd natural numbers.

```
#include <stdio.h>
int main()
{
    int i=1, n, Sum=0;
    printf("Enter number");
    scanf("%d", &n);
    while(i<=n)
    {
        Sum = Sum + (2*i - 1);
        i++;
    }
    printf("Sum of %d odd natural number : %d", n, Sum);
    return 0;
}
```

Q4) Write a Program to Calculate sum of square of first N natural number.

```
#include <stdio.h>
int main()
{
    int i=1, n, sum=0;
    printf("Enter number");
    scanf("%d", &n);
    while(i <= n)
    {
        sum = sum + (i * i);
        i++;
    }
    printf("Sum of square of first %d number : %d", n, sum);
    return 0;
}
```

Q5) Write a Program to Calculate sum of cubes of first N natural number.

```
#include <stdio.h>
int main()
{
    int i=1, n, sum=0;
    printf("Enter number");
    scanf("%d", &n);
    while(i <= n)
    {
        sum = sum + (i * i * i);
        i++;
    }
    printf("Sum of cubes of first %d number : %d", n, sum);
    return 0;
}
```

Q6) Write a Program to Calculate factorial of a number.

```
#include <stdio.h>
int main()
{
    int i=1, fact=1, n;
    printf("Enter number");
    scanf("%d", &n);
    while(i <= n)
    {
        fact = fact * i;
        i++;
    }
    printf("factorial of %d! is %d", n, fact);
    return 0;
}
```

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Q7) Write a Program to count digit in a given number

```
#include <stdio.h>
int main()
{
    int h n, Count = 0;
    printf("Enter number");
    scanf("%d", &n);
    while(n != 0)
    {
        n = n/10;
        Count++;
    }
    printf("No. of digit in an integer is: %d", Count);
    return 0;
}
```

Q8) Write a Program to check wheather a given number is a Prime number or not.

```
#include <stdio.h>
int main()
{
    int i, x;
    printf("Enter number");
    scanf("%d", &x);
    for(i = 2; i <= x-1; i++)
    {
        if(x % i == 0)
            break;
    }
    if(i == x)
        printf("Prime number");
    else
        printf("Not a Prime number");
    return 0;
}
```

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