

Assignment -11

Date: 30.06.22

1. // Sum of first N natural number

```
#include <stdio.h>
int main()
{
    int i, n, s;
    printf("Enter the last natural number = ");
    scanf("%d", &n);
    for (i = 1; i <= n; i++)
    {
        S = S + i;
    }
    printf("Sum = %.d", S);
}
```

2. // Sum of first N even natural number

```
#include <stdio.h>
int main()
{
    int n, i, s;
    printf("n = ");
    scanf("%d", &n);
    k = n;
    for (i = 1; n >= 1; i++)
    {
        if (i % 2 == 0)
        {
            S = S + i;
            n--;
        }
    }
    printf("Sum of first %.d\n natural number = %.d", K, S);
}
```

3. // Sum of first n odd natural number

```
#include <stdio.h>
int main()
{
    int n, i, s;
    printf("n = ");
    scanf("%d", &n);
    K = n;
    for (i = 1; n >= 1; i++)
    {
        if (i % 2 == 1)
        {
            S = S + i;
            n--;
        }
    }
    printf("Sum of first %.d\n natural number = %.d", K, S);
}
```


4. // Sum of square of first n natural number

```
#include <stdio.h>
int main()
{
    int n, i, s;
    printf("n=");
    scanf("%d", &n);
    for(i=1; i<=n; i++)
    {
        S = S + (i*i);
    }
    printf("Sum of square of first %d\natural number = %d", n, S);
}
```

5. // Sum of cube of first n natural number

```
#include <stdio.h>
int main()
{
    int n;
    printf("n=");
    scanf("%d", &n);
    for(i=1; i<=n; i++)
    {
        S = S + (i*i*i);
    }
    printf("cubes of Sum = %d", S);
}
```

6. // factorial of a number

```
#include <stdio.h>
int main()
{
    int n, f=1, i;
    printf("n=");
    scanf("%d", &n);
    for(i=1; i<=n; i++)
    {
        f = f * i;
    }
}
```

7. // Count digit of a given number

```
#include <stdio.h>
int main()
{
    int n;
    printf("n=");
    scanf("%d", &n);
    k = n;
    while (n != 0)
    {
        count++;
        n = n / 10;
    }
    printf("Total digit = %d", count);
}
```

8. // whether a given number is prime or not

```
#include <stdio.h>
int main()
{
    int n, i, count=1;
    printf("n=");
    scanf("%d", &n);
    for(i=2; i<=n/2; i++)
    {
        r = n % i;
        if (r == 0)
            count++;
    }
    if (count == 1)
        printf("%d Prime number", n);
    else
        printf("not a prime number");
}
```

printf("factorial of %d is = %d", n, f);

9. // LCM of two number

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

```
int main()
```

```
{
```

```
int m, n, max
```

```
printf("Enter two number = ");
```

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

```
max = m > n ? m : n;
```

```
while (1)
```

```
{ if (max % m == 0 && max % n == 0)
```

```
{ printf("LCM of %d and %d = %d", m, n, max);
```

```
break;
```

```
}
```

```
else
```

```
max++;
```

```
}
```

10. // Reverse a given number

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

```
int main()
```

```
{
```

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

```
printf("n = ");
```

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

```
while (n != 0)
```

```
{
```

```
r = n % 10;
```

```
rev = rev * 10 + r;
```

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

```
} printf("Reverse = %d", rev);
```