

Assignment 6

1. Write a program to calculate sum of first N natural numbers

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

2. 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 a number ");
    scanf("%d", &n);
    do
    {
        sum = sum + 2*i;
        i++;
    } while (i<=n);
    printf("Sum of first %d even natural number = %d", n, sum);
}
```

3. 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 a number ");
    scanf("%d", &n);
    do
    {
        sum = sum + 2*i-1;
        i++;
    } while (i<=n);
    printf("Sum of first %d odd natural number = %d", n, sum);
}
```

4. Write a program to calculate sum of squares of first N natural numbers

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

5. Write a program to calculate sum of cubes of first N natural numbers

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

6. Write a program to calculate factorial of a number

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

7. Write a program to count digits in a given number

```
#include<stdio.h>
int main()
{
    int n, count=0;
```

```

printf("enter a number ");
scanf("%d",&n);
while (n>0)
{
    n = n/10;
    count++;
}
printf("number of digit is = %d", count);
}

```

8. Write a program to check whether a given number is a Prime number or not

```

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

```

9. Write a program to calculate LCM of two numbers

```

#include<stdio.h>
int main()
{
    int a, b, i;
    printf("Enter the numbers ");
    scanf("%d%d",&a,&b);
    for(i=1; i<=a*b; i++)
    {
        if((i%a==0) && (i%b==0))
        {
            break;
        }
    }
}

```

```
    printf("LCM is %d ",i);  
}
```

10. Write a program to reverse a given number

```
#include<stdio.h>  
int main()  
{  
    int n, remain, rev_num = 0;  
    printf("Enter a number ");  
    scanf("%d", &n);  
    while (n>0)  
    {  
        remain = n%10;  
        rev_num = rev_num*10 + remain;  
        n = n/10;  
    }  
    printf("reverse number is = %d", rev_num);  
}
```