

## Assignment=6

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

```
#include <stdio.h>
int main()
{
    int x,i=1,sum=0;
    printf("Enter The Number : ");
    scanf("%d",&x);
    while(i<=x)
    {
        sum=sum+i;
        i++;
    }
    printf("\nThe sum of %d Natural number is %d ",x,sum);
}
```

2. Write a program to calculate the sum of first N even natural numbers.

```
#include <stdio.h>
int main()
{
    int x,i=1,sum=0;
    printf("Enter The Number : ");
    scanf("%d",&x);
    while(i<=x)
    {
        sum=sum+2*i;
        i++;
    }
    printf("\nThe sum of %d Even Natural number is %d ",x,sum);
}
```

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

```
#include <stdio.h>
int main()
{
    int x,i=1,sum=0;
    printf("Enter The Number : ");
    scanf("%d",&x);
```

```

do
{
    sum=sum+2*i-1;
    i++;
}while(i<=x);
printf("\nThe sum of %d odd Natural number is %d ",x,sum);
}

```

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

```

#include <stdio.h>
int main()
{
    int x,i=1,sum=0;
    printf("Enter The Number : ");
    scanf("%d",&x);
    do
    {
        sum=sum+i*i;
        i++;
    }while(i<=x);
    printf("\nThe sum of square of %d natural number is %d ",x,sum);
}

```

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

```

#include <stdio.h>
int main()
{
    int x,i,sum=0;
    printf("Enter The Number : ");
    scanf("%d",&x);
    for(i=1;i<=x;i++)
    {
        sum=sum+i*i*i;
    }
    printf("\nThe Sum of Cubes %d Natural Number is %d",x,sum);
}

```

**6. Write a program to calculate factorial of a number.**

```

#include <stdio.h>

```

```

int main()
{
    int x,i,sum=1;
    printf("Enter The Number : ");
    scanf("%d",&x);
    for(i=1;i<=x;i++)
    {
        sum=sum*i;
    }
    printf("\nThe Factorial of %d is %d ",x,sum);
}

```

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

```

#include <stdio.h>
int main()
{
    int x,count=0,k;
    printf("Enter The Number : ");
    scanf("%d",&x);
    for(;x;)
    {
        k=x%10;
        count++;
        x=x/10;
    }
    printf("\nThe digit in a given number 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 x,i;
    printf("Enter The Number: ");
    scanf("%d",&x);
    for(i=2;i<=x;i++)
    {
        if(x%i==0)
            break;
    }
}

```

```
if(x==i)
    printf("\nPrime Number");
else
    printf("\nNot a Prime Number");
}
```

**9. Write a program to calculate LCM of two numbers.**

```
#include <stdio.h>
int main()
{
    int x,y,i;
    printf("Enter the number : ");
    scanf("%d%d",&x,&y);
    for(i=1;i<=x*y;i++)
    {
        if(i%x==0 && i%y==0)
        {
            printf("\nLCM of %d and %d is %d ",x,y,i);
            break;
        }
    }
}
```

**10. Write a program to reverse a given number.**

```
#include <stdio.h>
int main()
{
    int i,n,k,x;
    printf("Enter The Number: ");
    scanf("%d",&x);
    while(x)
    {
        n=x%10;
        k=n;
        printf("%d",k);
        x=x/10;
    }
}
```

