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

```
#include <stdio.h>
int main(int argc, char *argv[])
{
   int num, tmp, sum = 0;
   printf("Enter number = ");
   scanf("%d", &num);
   tmp = num;
   do
   {
      sum += num;
      num--;
   } while (num);
   printf("Sum of first %d natural number = %d", tmp, sum);
   return 0;
}
```

Q2.Write a program to calculate sum of first N even natural numbers

```
#include <stdio.h>
int main(int argc, char *argv[])
{
   int num, sum = 0;
   printf("Enter number = ");
   scanf("%d", &num);
   for (int i = 2; i <= num; i += 2)
      sum += i;
   printf("Sum of first %d even natural numbers = %d", num, sum);
   return 0;
}
```

Q3.Write a program to calculate sum of first N odd natural numbers

```
#include <stdio.h>
int main(int argc, char *argv[])
{
   int num, sum = 0;
   printf("Enter number = ");
   scanf("%d", &num);
   for (int i = 1; i <= num; i += 2)
      sum += i;
   printf("Sum of first %d odd natural numbers = %d", num, sum);
   return 0;
}
```

Q4.Write a program to calculate sum of squares of first N natural numbers

```
#include <stdio.h>
int main (int argc, char *argv[]) {
int num,sum=0;
printf("Enter number = ");
scanf("%d",&num);
int tmp=num;
while (num)
{
   sum+=(num*num);
   num--;
}
printf("Sum of squares of first %d natural numbers = %d",tmp,sum);

   return 0;
}
```

Q5.Write a program to calculate sum of cubes of first N natural numbers

```
#include <stdio.h>
int main(int argc, char *argv[])
{
   int num, tmp, sum;
   printf("Enter number = ");
   scanf("%d", &num);
   do
   {
      sum += (num * num * num);
      num--;
   } while (num);
   printf("Sum of cubes of first %d natural numbers = %d", tmp, sum);
   return 0;
}
```

Q6.Write a program to calculate factorial of a number

```
#include <stdio.h>
int main(int argc, char *argv[])
{
    int num, fact = 1;
    printf("Enter number = ");
    scanf("%d", &num);
    int tmp = num;
    while (num)
    {
        fact *= num;
        num--;
    }
    printf("Factorial of %d = %d", tmp, fact);
    return 0;
}
```

Q7.Write a program to count digits in a given number

```
#include <stdio.h>
int main(int argc, char *argv[])
{
    int num, rem, count = 0;
    printf("Enter number = ");
    scanf("%d", &num);
    while (num)
    {
        rem = num % 10;
        num = num / 10;
        count++;
    }
    printf("Digit in given number = %d", count);
    return 0;
}
```

Q8.Write a program to check whether a given number is a Prime number or not

```
#include <stdio.h>
int main(int argc, char *argv[])
{
   int num, i = 2;
   printf("Enter number = ");
   scanf("%d", &num);
   while ((num % i != 0) && (i < num))
   {
      i++;
   }
   if (i == num)
      printf("%d number is prime", num);
   else
      printf("number is not prime");
   return 0;
}
```

Q9.Write a program to calculate LCM of two numbers

```
#include <stdio.h>
int main(int argc, char *argv[])
{
   int a, b, i = 2, sum = 1, flag = 0;
   printf("Enter two numbers = ");
   scanf("%d %d", &a, &b);
   while ((a != 1) || (b != 1))
   {
      if (a % i == 0)
      {
         a = a / i;
         flag = 1;
      }
      if (b % i == 0)
      {
         b = b / i;
         flag = 1;
      }
      if (flag == 1)
         sum = sum * i;
      if ((a % i != 0) && (b % i != 0))
      {
         i++;
```

```
            flag = 0;
        }
    }
    printf("%d", sum);
    return 0;
}
```

Q10.Write a program to reverse a given number

```
#include <stdio.h>
int main(int argc, char *argv[])
{
    int num, rem, rev = 0;
    printf("Enter number = ");
    scanf("%d", &num);
    while (num)
    {
        rev = (10 * rev + num % 10);
        num /= 10;
    }
    printf("%d", rev);
    return 0;
}
```