Q.1 calculate sum of first N natural numbers.

```c
#include <stdio.h>
int main()
{
    int n, s, i;
    printf("enter a number");
    scanf("%d", &n);
    for(i=1; i<=n; i++)
    for(i=1; s=0; i<=n; i++)
    S = S+i;
    printf("%d", S);
    return 0;
}
```

n
| 7 |

Ans enter a number 7

28

Q.2 calculate sum of first N even natural number

```c
#include <stdio.h>
int main()
{
    int int n, s, i;
    printf("enter a number");
    scanf("%d", &n);
    for(i=1; s=0; i<=n; i++)
    s = S+2*i;
    printf("%d", S);
    return 0;
}
```

Ans enter a number 7

56

Q.3 calculate sum of first N odd natural number

```c
#include <stdio.h>
int main()
{
    int n, s, i;
    printf("enter a number");
    scanf("%d", &n);
    for(i=1, s=0; i<=n; i++)
    s = s + 2*i-1;
    printf("%d", s);
    return 0;
}
```

Ans enter a number 10

100

Q.4 calculate sum of squares of first N natural number

```c
#include <stdio.h>
int main()
{
    int n, s, i;
    printf("enter a number");
    scanf("%d", &n);
    for(i=1, s=0; i<=n; i++)
    s = s + i*i;
    printf("%d", s);
    return 0;
}
```

Ans enter a number 5

55

Q.5 calculate sum of cubes of first N natural number

```c
#include <stdio.h>
int main()
{
    int n, s, i;
    printf("enter a number");
    scanf("%d", &n);
    for (i=1; s=0; i<=n; i++)
        s=s + i*i*i;
    printf("%d", s);
    return 0;
}
```

Ans enter a numbers to 8

1296

Q.6 calculate factorial of a number.

```c
#include <stdio.h>
int main()
{
    int n, i, fact=1;
    printf("enter a number");
    scanf("%d", &n);
    for (i=1; i<=n; i++)
```

```
,s=0

printf("%d");
s=s*n, fact=fact*i;
printf("%d", s);
return 0
```

```c
    fact = fact*i;
    printf("factorial of %d is %d", n, fact);
    return 0;
}
```

Ans enter a number 5
factorial of 5 is 120

Q.4 count digits in a given number

```c
#include <stdio.h>
int main ()
int
{
    int n, count = 0;
    printf ("enter value of n ");
    scanf ("%d", &n);
    while (n)
    {
        n = n/10;
        count++;
    }
    printf ("number of digit is %d", count);
    return 0;
}
```

Ans enter value of n 1134

number of digit is 4

Q:8 check whether a given number is a prime number ar nob.

```c
#include <stdio.h>
int main()
{
    int n, i, flag = 0;
    printf("enter value of n");
    scanf("%d", &n);
    for( i=2; i<= &n/2; i++)
            i<n
    {
        if(n%.i == 0)
        {
            flag = 1;
            break;
        }
    }
    if(flag == 1)
        printf("Nob prime");
    else
        printf("prime");

    return 0;
}
```

Ans   enter value of n 25

      nob prime

a.g calculate LCM of two number

```
#include <stdio.h>
int main()
{
    int a, b, i;
    printf("enter two number");
    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);
    return 0;
}
```

LCM → Leas
          mult

2×1 = 2   4×1 =
2×2 = 4   4×2 =
2×3 = 6   4×3 =
2×4 = 8   4×4 =

Ans enter two number 12 32

LCM is 96

2 | 3
2 | 1
2 | 8
2 | 4
2 | 2
2
—
3
2 | 4
2 | 2
2 | 1
2 | 6

Q.10 reverse a given number

123 → 32

```c
#include <stdio.h>
int main()
{
    int n, i, rem, rev = 0;
    printf("enter a number");
    scanf("%d", &n);
    while (n != 0)
    {
        rem = n % 10;
        n = n / 10;
        rev = rev * 10 + rem;
    }
    printf("Reverse is %d", Rev);
    return 0;
}
```

Ans enter a number 3567

Reverse is 7653