

Assignment : 6

Use any loop

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

```
#include<stdio.h>

int main()
{
    int n ;
    int sum =0 ;
    printf(" enter the value of n :");
    scanf("%d",&n);

    for(int i = 1; i<=n ; i++){
        sum = sum+i;
    }
    printf("sum is : %d",sum);

    return 0;
}
```

Que 2 : Write a program to calculate sum of first N even natural numbers

```
#include<stdio.h>

int main()
{
    int n ;
    int sum =0 ;
    printf(" enter the value of n :");
    scanf("%d",&n);

    for(int i = 1; i<=n ; i++){

        if(i%2 == 0)
            sum = sum+i;
    }
    printf("sum is : %d",sum);

    return 0;
}
```

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

```
#include<stdio.h>

int main()
{
    int n ;
    int sum =0 ;
    printf(" enter the value of n :");
    scanf("%d",&n);

    for(int i = 1; i<=n ; i++){

        if(i%2 != 0)
            sum = sum+i;

    }
    printf("sum is : %d",sum);

    return 0;
}
```

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

```
#include<stdio.h>

int main()
{
    int n ;
    int sum =0 ;
    printf(" enter the value of n :");
    scanf("%d",&n);

    for(int i = 1; i<=n ; i++){

        int square = i*i;
        sum = sum+square;

    }
    printf("sum is : %d",sum);

    return 0;
}
```

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

```
#include<stdio.h>

int main()
{
    int n ;
    int sum =0 ;
    printf(" enter the value of n :");
    scanf("%d",&n);

    for(int i = 1; i<=n ; i++){

        int cube  = i*i*i;
        sum = sum+cube;

    }
    printf("sum of cubes is : %d",sum);

    return 0;
}
```

Que 6 : Write a program to calculate factorial of a number

```
#include <stdio.h>

int main()
{
    int n;
    printf("enter a number");
    scanf("%d",&n);
    int fact =1;
    for(int i= 1;i<=n;i++){

        fact = fact*i;
    }
    printf("factorial is %d",fact);

    return 0;
}
```

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

```
#include<stdio.h>

int main()
{
    int n ;
    int count =0 ;
    printf(" enter the value of n :");
    scanf("%d",&n);

    while(n != 0){
        int rem = n % 10;
        n/=10;
        count++;
    }
    printf("count is : %d",count);

    return 0;
}
```

Que 8 : Write a program to check whether a given number is a Prime number or

Not

```
#include <stdio.h>

int main()
{
    int n;
    printf("enter a number");
    scanf("%d",&n);
    int flag =0 ;

    for(int i = 2 ;i < n;i++) {
        if( n%i == 0){
            printf(" not a prime ");
            flag =1;
            break;
        }
    }
    if(flag == 0){
```

```

        printf(" it is a prime no ");
    }

    return 0;
}

```

Que 9 : Write a program to calculate LCM of two numbers

```

#include <stdio.h>
int main() {
    int n1, n2, max;
    printf("Enter two positive integers: ");
    scanf("%d %d", &n1, &n2);

    // maximum number between n1 and n2 is stored in max
    max = (n1 > n2) ? n1 : n2;

    while (1) {
        if (max % n1 == 0 && max % n2 == 0) {
            printf("The LCM of %d and %d is %d.", n1, n2, max);
            break;
        }
        ++max;
    }
    return 0;
}

```

Que 10 : Write a program to reverse a given number

```

#include <stdio.h>
int main() {

    int n ;
    printf("enter a number ");
    scanf("%d",&n);

    int ans = 0;
    for(int i =0 ; i <n ;i++){
        int rem = n %10;
        n/=10;
        ans = ans * 10+rem;
    }

    printf("reverse of a number is %d",ans);
    return 0;
}

```

