

## ASSINGMENT-6 A JOB READY BOOT CAMP IN C++, DSA & IOT.

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

```
#include<stdio.h>

int main()
{
    int n,i=1,sum=0;
    printf("Enter The value of N:");

    scanf("%d",&n);

    while(i<=n)
    {
        sum=sum+i;
        printf(" %d",sum);

        i=i+1;
    }
}
```

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

```
#include<stdio.h>

int main()
{
    int n,i=2,sum=0;
    printf("Enter even value of N:");

    scanf("%d",&n);

    while(i<=n)
    {
        sum=sum+i;
        printf(" %d",sum);

        i=i+2;
    }
}
```

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

```
#include<stdio.h>

int main()
{
    int n,i=1,sum=0;
    printf("Enter even value of N:");

    scanf("%d",&n);

    while(i<=n)
    {
        sum=sum+i;
        printf(" %d",sum);

        i=i+2;}}
```

### 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 the number first N natural square:");

    scanf("%d",&n);

    while(i<=n){
        sum=sum+i*i;
        printf(" %d",sum);

        i++;
    }}
```

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### 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 the number first N natural cube:");

scanf("%d",&n);

while(i<=n){

sum=sum+i*i*i;

printf(" %d",sum);

i++;

}

}
```

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

```
#include<stdio.h>

int main()

{

int n,i,fact=1;

printf("Enter the factorial number!:" );

scanf("%d",&n);

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

fact=fact*i;;

printf("%d",fact);

return 0;}
```

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

```
#include<stdio.h>

int main()
{
    int a,count=0;
    printf("Enter aNumber:");

    scanf("%d",&a);

    while(a!=0)
    {
        a=a/10;
        count++;
    }

    printf("Number of digit is %d",count);

}
```

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

```
#include<stdio.h>

int main()
{
    int n,i,m=0;
    printf("Enter a number:");
    scanf("%d",&n);
    for(i=2;i<n/2;i++)
    {
        if(n%i==0)
        {

            m=1;
            break;}

    }

    if(m==1)
    printf("not prime");

    else
    printf("prime");

    return 0;

}
```

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

```
#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;
}
```

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

```
#include<stdio.h>

int main()
{
    int a,i,rem,rev=0;
    printf("Enter a number:");

    scanf("%d",&a);

    while(a!=0)
    {

        rem=a%10;

        a=a/10;

        rev=rev*10+rem;

    }

    printf("%d",rev);

}
```