Assignment - 6 A Job Ready Bootcamp in C++, DSA and IOT

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

#include<stdio.h>

int main()

{

int i,n,s=0;

printf("Enter a number \n ");

scanf("%d",&n);

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

s+=i;

printf("Sum of first %d natural number is %d",n,s);

return 0;

}

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

#include<stdio.h>

int main()

{

int i,n,s=0;

printf("Enter a Number: \n");

scanf("%d",&n);

for(i=2;i<=2\*n;i+=2)

s+=i;

printf("Sum of the first %d even natural number is %d",n,s);

return 0;

}

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

#include<stdio.h>

int main()

{

int i,n,s=0;

printf("Enter a Number: \n");

scanf("%d",&n);

for(i=1;i<=2\*n;i+=2)

s+=i;

printf("Sum of the first %d odd natural number is %d",n,s);

return 0;

}

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

#include<stdio.h>

int main()

{

int i,n,s=0;

printf("Enter a Number:\n");

scanf("%d",&n);

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

s+=i\*i;

printf("Sum of square of first %d natural numbers is %d \n",n,s);

return 0;

}

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

#include<stdio.h>

int main()

{

int i,n,s=0;

printf("Enter a Number:\n");

scanf("%d",&n);

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

s+=i\*i\*i;

printf("Sum of cube of first %d natural numbers is %d \n",n,s);

return 0;

}

6. Write a program to calculate factorial of a number

#include<stdio.h>

int main()

{

double i,n,s=1;

printf("Enter a Number:\n");

scanf("%lf",&n);

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

s\*=i;

printf("Factorial of %lf is %lf \n",n,s);

return 0;

}

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

#include<stdio.h>

int main()

{

int i,n;

printf("Enter a number :\n");

scanf("%d",&n);

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

n/=10;

printf("Here Number of digits is %d \n",i);

return 0;

}

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

not

#include<stdio.h>

int main()

{

int i,n,c=0;

printf("Enter a number :\n");

scanf("%d",&n);

for(i=2;i<n;i++)

{

if(n%i==0)

c++;

}

if(c>0)

printf("%d is not a prime number\n",n);

else

printf("%d is a Prime number \n",n);

return 0;

}

9. Write a program to calculate LCM of two numbers

#include<stdio.h>

int main()

{

int i,a,b;

printf("Enter two numbers:\n");

scanf("%d %d",&a,&b);

for(i=1;i<=a\*b;i++)

{

if(i%a==0 && i%b==0)

{

printf("%d is the LCM of %d and %d \n",i,a,b);

break;

}

}

printf("\n");

return 0;

}

10. Write a program to reverse a given number

#include<stdio.h>

int main()

{

int i,n;

printf("Enter a number: \n");

scanf("%d",&n);

while(n>0)

{

i=n%10;

n=n/10;

printf("%d",i);

}

printf("\n");

return 0;

}