Assignment – 6

A Job Ready Bootcamp in C++, DSA and IOT

MySirG

Use any loop

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

ANS:1

#include<stdio.h>

int main()

{

int n;

printf("ENTER NATURAL NUMBERS WHOSE SUM YOU WANT TO PRINT ::");

scanf("%d",&n);

int sum = 0;

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

sum += i;

printf("sun is %d\n",sum);

return 0;

}

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

ANS:2

#include<stdio.h>

int main()

{

int n;

printf(" HOW MANY EVEN NUMBERS SUM YOU WANT :");

scanf("%d",&n);

int sum = 0;

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

sum+=i;

printf("%d THE SUM OF EVEN NUMBERS IS %d",n,sum);

return 0;

}

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

ANS:3

#include<stdio.h>

int main()

{

int n;

printf(" HOW MANY odd NUMBERS SUM YOU WANT :");

scanf("%d",&n);

int sum = 0;

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

sum+=i;

printf("%d THE SUM OF odd NUMBERS IS %d",n,sum);

return 0;

}

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

ANS:4

#include <stdio.h>

int main()

{

int n;

printf("enter the numbers whose squares sum you want: ");

scanf("%d", &n);

int sum = 0;

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

sum += i \* i;

printf("%d The Sum Of Square Of First N Natural Number is: %d", n, sum);

return 0;

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

ANS:5

#include <stdio.h>

int main()

{

int n;

printf("enter the numbers whose cubes sum you want: ");

scanf("%d", &n);

int sum = 0;

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

sum += i \* i \* i;

printf("%d The Sum Of CUBES Of First N Natural Number is: %d", n, sum);

return 0;

}

6. Write a program to calculate factorial of a number

ANS:6

#include <stdio.h>

int main()

{

int n;

printf("Enter a number, to print the factorial of the number: ");

scanf("%d", &n);

int fact = 1;

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

fact \*= i;

printf("%d number factorial is: %d", n, fact);

return 0;

}

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

ANS:7

#include <stdio.h>

int main()

{

int num;

printf("Enter Number, To Count Its Digit: ");

scanf("%d", &num);

int count = 0;

for (int i = num; i != 0; i /= 10)

count++;

printf("%d Number, Total Digit is: %d", num, count);

return 0;

}

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

Not

ANS:8

#include <stdio.h>

int main()

{

int num,i;

printf("Enter Number To Check It Is prime or not: ");

scanf("%d", &num);

for (i = 2; i <= num / 2; i++)

if (num % i == 0)

break;

if (i == num / 2 + 1)

printf("It Is A Prime Number");

else

printf(" It Is Not A Prime Number");

return 0;

}

9. Write a program to calculate LCM of two numbers

ANS:9

#include <stdio.h>

int main()

{

int x, y;

printf("Enter Two Numbers,To Calculate There LCM: ");

scanf("%d%d", &x, &y);

int lcm = 1;

int i = 1;

while (1)

{

if (i % x == 0 && i % y == 0)

{

lcm = i;

break;

}

i++;

}

printf("LCM is: %d", lcm);

return 0;

}

10. Write a program to reverse a given number

ANS:10

#include <stdio.h>

int main()

{

int n;

printf("Enter A Number To Find Its Reverse: ");

scanf("%d", &n);

int reverseNumber = 0, ct = 0, flag = 1;

while (n != 0)

{

if (n % 10 == 0 && flag)

ct++;

else

flag = 0;

reverseNumber = reverseNumber \* 10 + n % 10;

n /= 10;

}

printf("Reverse number Of Given Number Is: ");

if (ct != 0)

for (int i = 1; i <= ct; i++)

printf("0");

printf("%d", reverseNumber);

return 0;

}