

ASSIGNMENT 2:-

1) Write a program to check whether a number is prime or not

```
#include<iostream>

using namespace std;
int main()
{
    int num,i,count=0;
    cout<<"Enter the number to be checked:";
    cin>>num;
    for(i=1;i<num;i++)
    {
        if(num%i==0)
            count++;
    }
    if(count>1)
        cout<<"\n"<<num<<" is not prime";
    else
        cout<<"\n"<<num<<" is prime";

    return 0;
}
```

Output:-

Enter the number to be checked:6

6is not prime

=== Code Execution Successful ===

2)

```
int num, i, count, n, isprime;
cout << "enter a number";
cin >> n;
count = 0;
for (num = 1; count <= n; num++)
{
    isprime = 0;
    count++;
    for (i = 2; i < num ; i++) {
        if (num % i == 0) {

            isprime = 0;
            break;
        }
    }
    if (isprime == 0 && num != 1)
        cout << num << endl;
}
return 0;
}
```

3)

```
#include<iostream>
using namespace std;
int main()
{
    int i, j,num=5;
    cout << "Enter the num:";
```

```

    cin >> num;

    for (i = 1; i <= num; i++)
    {
        for (j = 1; j <= i; j++)
        {
            cout << (char)('A' + j - 1) << " ";
        }
        cout << endl;
    }
    return 0;
}

```

Output:-

Enter the num:9

```

A
A B
A B C
A B C D
A B C D E
A B C D E F
A B C D E F G
A B C D E F G H
A B C D E F G H I

```

4) To perform mathematical operation

```

#include<iostream>

using namespace std;
int main()
{
    float num1,num2;
    char oper;
    cout<<"enter an operator:";
    cin>>oper;
    cout<<"enter two numbers:";
    cin>>num1>>num2;

    switch(oper)
    {
        case '+':
            cout<<num1<<"+"<<num2<<"="<<num1+num2;
            break;
        case '-':
            cout<<num1<<"-"<<num2<<"="<<num1-num2;
            break;
        case '*':
            cout<<num1<<"*"<<num2<<"="<<num1*num2;
            break;
        case '/':
            cout<<num1<<"/"<<num2<<"="<<num1/num2;
            break;
        default:
            cout<<"Exit";
    }
    return 0;
}

```

Output:

enter an operator:*

enter two numbers:2

2

2*2=4

=== Code Execution Successful ===

5)

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int i, j,num;
```

```
    cout << "Enter the num:";
```

```
    cin >> num;
```

```
    for (i = 0; i <= num; i++)
```

```
    {
```

```
        for (j = 1; j <= i; j++)
```

```
        {
```

```
            cout << (int)(1+ j - 1) << " ";
```

```
        }
```

```
        cout << endl;
```

```
    }
```

```
    return 0;
```

```
}
```

Output:-

Enter the num:9

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

1 2 3 4 5 6

1 2 3 4 5 6 7

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8 9