Practical 2.(c)

Aim: Write a C++ program to generate all the prime numbers between 1 and n, where n is a value supplied by the user.

Algorithm:(i)Start

(ii)First,take the number N as input.

(iii)Then use a for loop to iterate the numbers from 1 to N

(iv)Then check for each number to be a prime number.If it is a prime number,print it.

(v)Stop

Theory: In this practical,we will see a C++ program to generate all the prime numbers between 1 and n, where n is a value supplied by the user.

Program:

```
#include
<iostream> int
main() {
  std::cout<<"08_Rabin
```

```
Nadar\n"; int num, i, upto;
//Take input from user
std::cout<<"Find prime numbers upto: ";
std::cin>>upto;
std::cout<<"All prime numbers
upto"<<upto<<"are:";
for(num=2;num<=upto;num++)
{
   for(i=2;i<=(num/2);i++)
   {
      if(num%i==0)
      {
         i=num;
```

```
            break;
        }
    }
    //If the number is prime then print it.
    if(i!=num)
    {
        std::cout<<num<<"";
    }
  }
  return 0;
}
```

Output:

Conclusion:

We have successfully written the code and executed it.