FOP ASSIGNMENT -1

NAME :

ASIM ABDULLAH

CLASS:

ME-15C

REG NMB:

463230

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

NUST

QUESTION -1

```cpp
#include <iostream>
using namespace std;
int main(){
    int numb;
    cout<<"plz enter your number"<<endl;
    cin>>numb;
    cout<<"factors of numbers"<<endl;
    for( int i=1;i<=numb;i++){
        if( numb%i==0)

        {
            cout<<i<<endl;

        }}
        return 0;
    }
```

```
plz enter your number
60
factors of numbers
1
2
3
4
5
6
10
12
15
20
30
60
```

QUESTION-2

OUTPUT IS :

X is 5 AND Y is 10

QUESTION -3

```cpp
#include <iostream>

using namespace std;

int main()
{int num;
    cout << "enter your number" << endl;
    cin>>num;                                   basic_ostream&< C
    if(num>=10&&num<=20){
        cout<<"1"<<endl;


    }else{
        cout<<"0"<<endl;
    }
    return 0;
}
```

```
enter your number
18
1

Process returned 0 (0x0)   execution time : 1.835 s
Press any key to continue.
```

QUESTION -4

```
using namespace std ;
   int main(){
    int n;
    int count=2;
    int i=1;
    int largestisprime=1;
    cout<<"enter the value n"<<endl;
    cin>>n;
    bool isprime= true;
    while( count<=n)
    {
        isprime=true;
        i=2;
        while(i<count&&isprime==true){
            if( !( count%i==0))
           {
            isprime=true;
           }
        else{
                isprime=false;
              }
           i++;



}
   if(isprime==true)
   {
    largestisprime=count;
   }
   count++;}
   cout<<"The lagest prime numebr is"<<endl;
   cout<<largestisprime<<endl;
   return 0;}
```

```
enter a positive integer
58
53

Process returned 0 (0x0)   execution time : 4.767 s
Press any key to continue.
```

QUESTION -5

```cpp
#include <iostream>
#include <algorithm>

using namespace std;

int main() {
    string str1, str2;

    cout << "Enter the first string: ";
    cin >> str1;

    cout << "Enter the second string: ";
    cin >> str2;

    if (str1 == str2) {
        reverse(str2.begin(), str2.end());
        cout << "Strings were equal. After rotation, the second string is: " << str2 << endl;
    } else {
        cout << "Strings are not equal." << endl;
    }

return 0;}
```

```
Enter the first string: HELLO
Enter the second string: HELLO
Strings were equal. After rotation, the second string is: OLLEH

--------------------------------
Process exited after 7.057 seconds with return value 0
Press any key to continue . . .
```

QUESTION- 6

```cpp
#include <iostream>

using namespace std;

int main() {
    int dividend, divisor, quotient = 0;

    cout << "Enter the dividend: ";
    cin >> dividend;

    cout << "Enter the divisor: ";
    cin >> divisor;

    while (dividend >= divisor) {
        dividend -= divisor;
        ++quotient;
    }

    cout << "Quotient: " << quotient << endl;

    return 0;
}
```

```
Enter the dividend: 12
Enter the divisor: 2
Quotient: 6

--------------------------------
Process exited after 3.991 seconds with return value 0
Press any key to continue . . .
```

QUESTION -8

```cpp
#include <iostream>

using namespace std;

int main() {
    int a[10] = {1, 2, 3, 4, 5};

    for (int i = 5; i < 10; ++i) {
        a[i] = i + 1;
    }

    for (int i = 0; i < 10; ++i) {
        cout << a[i] << " ";
    }

    cout << endl;

    return 0;
}
```

```
1 2 3 4 5 6 7 8 9 10

--------------------------------
Process exited after 0.09789 seconds with return value 0
Press any key to continue . . .
```

QUESTION -10

```cpp
#include <iostream>

using namespace std;

int main() {
    int arr[6] = {5, 2, 8, 1, 6, 4};

    for (int i = 0; i < 6 - 1; ++i) {
        for (int j = 0; j < 6 - i - 1; ++j) {
            if (arr[j] > arr[j + 1]) {

                int temp = arr[j];
                arr[j] = arr[j + 1];
                arr[j + 1] = temp;
            }
        }
    }

    for (int i = 0; i < 6; ++i) {
        cout << arr[i] << " ";
    }

    cout << endl;

    return 0;
}
```

```
1 2 4 5 6 8

--------------------------------
Process exited after 0.03224 seconds with return value 0
Press any key to continue . . .
```