



Fundamentals of Programming
ME-15
Section B
1st Semester
Date of Submission: 24/10/2023
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```
#include<iostream>
```

```
using namespace std;
```

```
int main () {
```

```
    for (int x; x <= 150; x++) {
```

```
        if (x % 10 == 0) {    /*when using the continue statement, we have to write a  
condition that is true, which will be overlooked, so in the output we get values that don't follow the  
condition.*/
```

```
            continue;
```

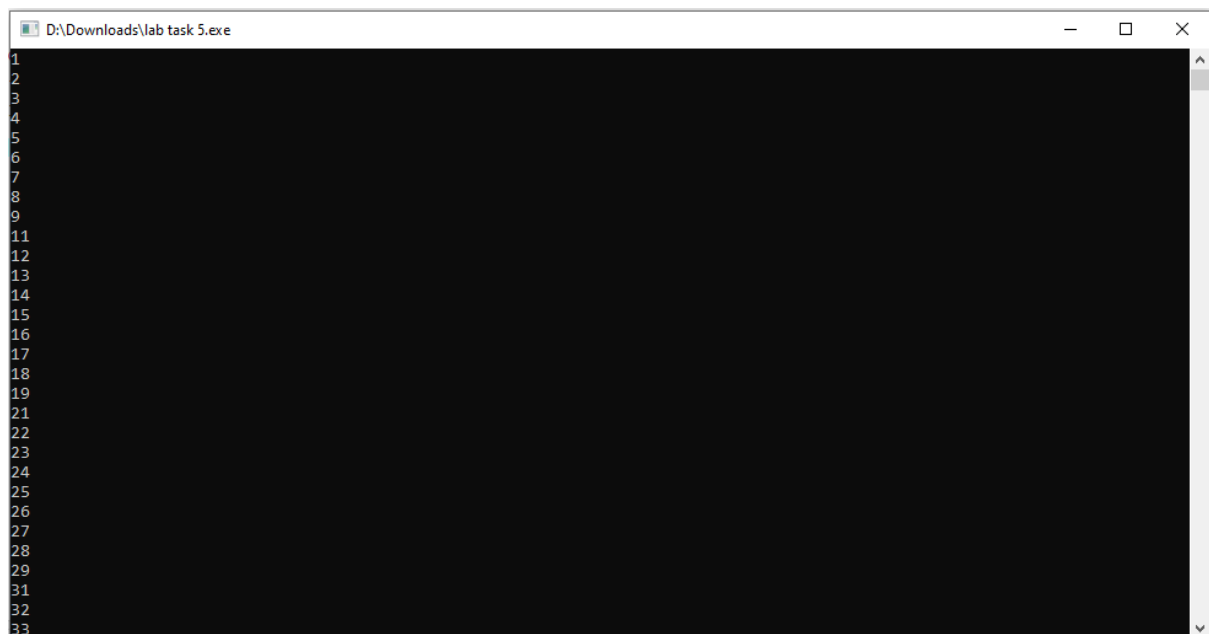
```
        }
```

```
        cout<<x<<endl; //the output will show numbers that are not multiples of ten then
```

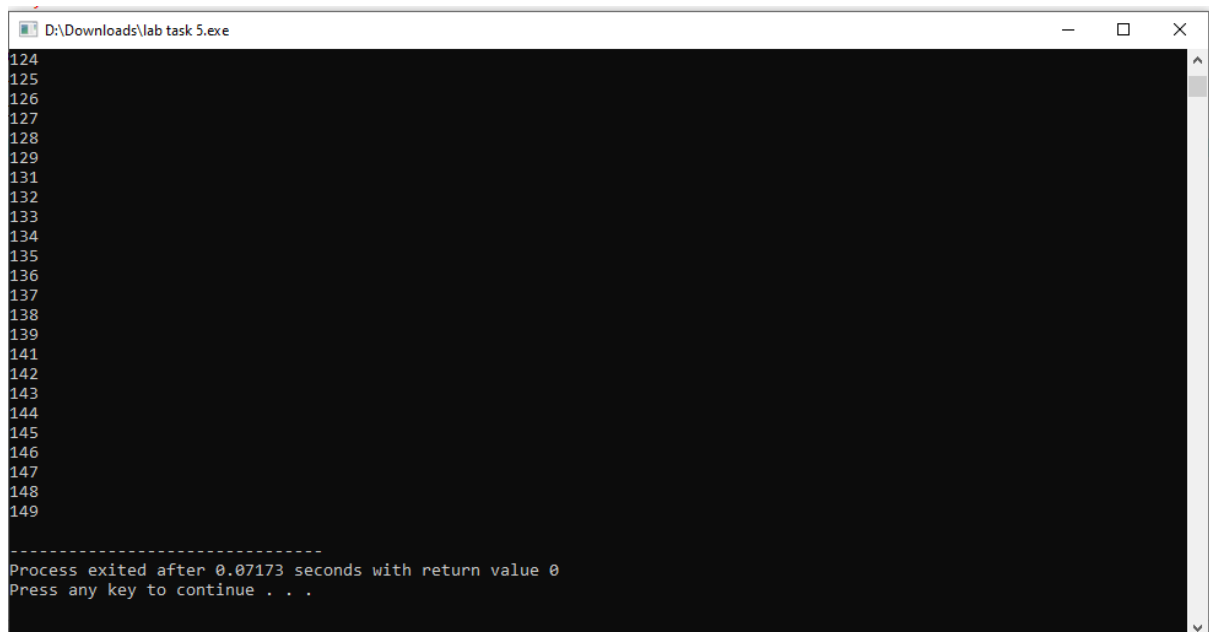
```
    }
```

```
    return 0;
```

```
}
```



```
D:\Downloads\lab task 5.exe
1
2
3
4
5
6
7
8
9
11
12
13
14
15
16
17
18
19
21
22
23
24
25
26
27
28
29
31
32
33
```



```
D:\Downloads\lab task 5.exe
124
125
126
127
128
129
131
132
133
134
135
136
137
138
139
141
142
143
144
145
146
147
148
149
-----
Process exited after 0.07173 seconds with return value 0
Press any key to continue . . .
```

```
#include<cmath>
```

```
int main(){
```

```
    bool prime = true;
```

```
        int num;
```

```
        cout<<"Enter a number"<<endl;
```

```
        cin>>num;
```

```
        for(int x=2; x<=num; x++){
```

```
if (num == 2)
```

```
break;
```

```
        if (num % x == 0){
```

```
            cout<<"Number is not prime"<<endl;
```

```
prime = false;
```

```
            break;}
```

```
}
```

```
if ( prime == true)
```

```
cout<<"Number is prime"<<endl;
```

```
return 0;
```

```
}
```

D:\Downloads\vat.exe

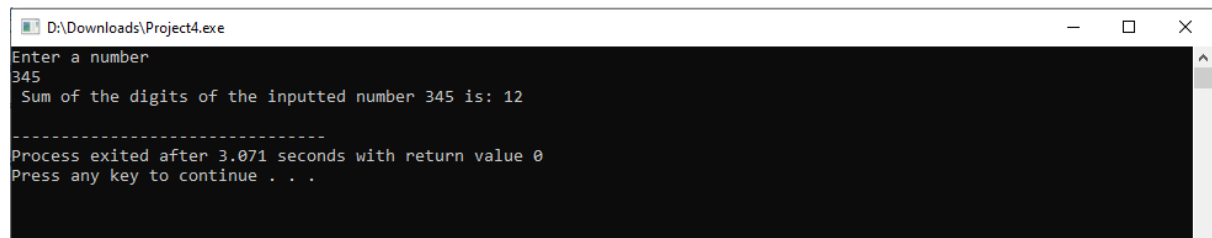
```
Enter a number:
27
Number is not prime

-----
Process exited after 1.441 seconds with return value 0
Press any key to continue . . .
```

```
int main (){
    int num1, num2, num3, sum=0;
    cout<<"Enter a number"<<endl;
    cin>>num1;
    num3 = num1;
    while(num1>0) {
        num2 = num1 % 10; //remainder obtained
        sum += num2; //remainder added to the sum
        num1 /= 10; /*quotient of the first statement is now num1 and the whole process is
repeated.*/
    }
    cout<<" Sum of the digits of the inputted number "<<num3<<" is: "<<sum<<endl;
    return 0;
}
```

/*these statements after 'while' mean that dividing num1 by ten should give us a remainder of num2, which is added to the sum (it is equal to zero); the new value of num1 is divided by ten again and then the final number obtained keeps going through the loop. Dividing num1 by ten gives us a number in decimals but because we've declared these numbers as integers, the digit before the decimal will be considered only. That number will then be divided by ten again and the whole process will be repeated until num1 has reached zero. */

/*we have to declare num1 (the inputted number) as num3 because otherwise the computer will print num1 as 0 instead. Due to the loop num1 will constantly be divided until it becomes zero, so putting it equal to num3 will store the original number and in the end print that number as well. */



```
D:\Downloads\Project4.exe
Enter a number
345
Sum of the digits of the inputted number 345 is: 12

-----
Process exited after 3.071 seconds with return value 0
Press any key to continue . . .
```