



**NATIONAL UNIVERSITY OF SCIENCE & TECNOLOGY**

**SCHOOL OF MECHANICAL AND MANUFACTURING ENGINEERING**

**[FUNDAMENTALS OF PROGRAMMING]**

**Home Task # 4**

***SEMESTER # 01***

**CLASS: - ME-15 [SEC A]**

**NAME: TALHA MATEEN**

**ROLL NO.: 454713**

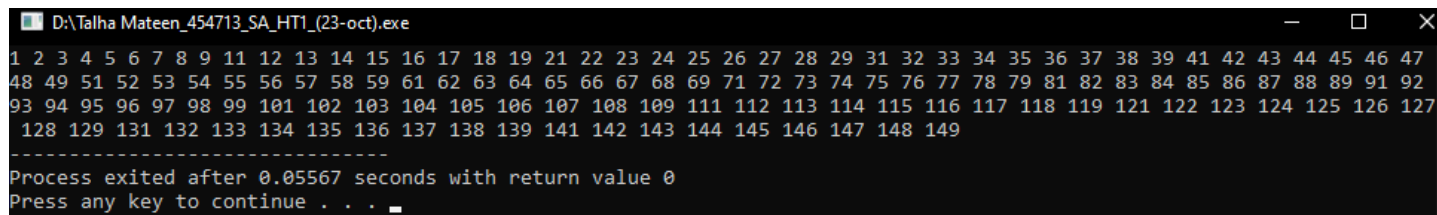
## TASK # 1:

```
#include <iostream>
using namespace std;
int main(){
//code is showing non-multiples of 10 from 1 to 150...
for (int i=1; i<=150; i++){

//number is not multiple of 10...
if (i % 10 == 0)

{continue;}
//output is ____
cout<<i<< " ";}
return 0;

}
```



```
D:\Talha Mateen_454713_SA_HT1_(23-oct).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 34 35 36 37 38 39 41 42 43 44 45 46 47
48 49 51 52 53 54 55 56 57 58 59 61 62 63 64 65 66 67 68 69 71 72 73 74 75 76 77 78 79 81 82 83 84 85 86 87 88 89 91 92
93 94 95 96 97 98 99 101 102 103 104 105 106 107 108 109 111 112 113 114 115 116 117 118 119 121 122 123 124 125 126 127
128 129 131 132 133 134 135 136 137 138 139 141 142 143 144 145 146 147 148 149
-----
Process exited after 0.05567 seconds with return value 0
Press any key to continue . . . _
```

## TASK # 2:

```
#include <iostream>
using namespace std;
int main(){

    //code for sum of digits of a number.
    int number;
    int sum=0;

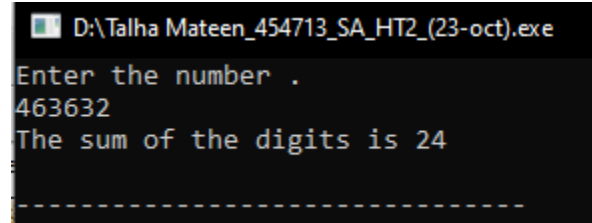
    //input number from user...
    cout<<"Enter the number ."<<endl;
    cin>>number;

    if (number < 0)
    { number=-number; }

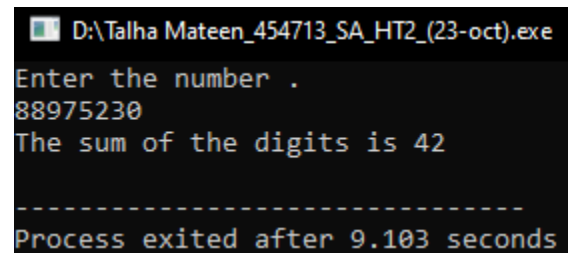
    while (number > 0)    {
    int digit = number % 10;
    sum += digit;
    number /=10; }

    //output result is ...
    cout<<"The sum of the digits is "<<sum<<endl;

    return 0;
}
```



```
D:\Talha Mateen_454713_SA_HT2_(23-oct).exe
Enter the number .
463632
The sum of the digits is 24
-----
```



```
D:\Talha Mateen_454713_SA_HT2_(23-oct).exe
Enter the number .
88975230
The sum of the digits is 42
-----
Process exited after 9.103 seconds
```

### TASK # 3:

```
#include <iostream>
using namespace std;
int main(){
//program to check the entered number is prime or not...
int x;
//using bool here...
bool isprime=true;
//input the number from user..
cout<<"input the value of x:\n";
cin>>x;

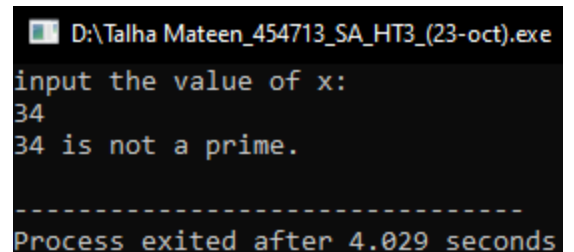
if (x<= 1){

isprime = false;
}
else {
for (int i=2; i*i<= x; i++){

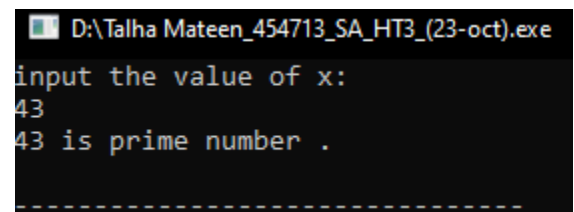
if(x % i==0){
isprime= false;
break; }}

//for prime numbers...
if (isprime){
cout<< x <<" is prime number ."<<endl;}

else {
//condition for composite numbers...
cout<< x <<" is not a prime."<<endl;
}
return 0;}
```



```
D:\Talha Mateen_454713_SA_HT3_(23-oct).exe
input the value of x:
34
34 is not a prime.
-----
Process exited after 4.029 seconds
```



```
D:\Talha Mateen_454713_SA_HT3_(23-oct).exe
input the value of x:
43
43 is prime number .
-----
```