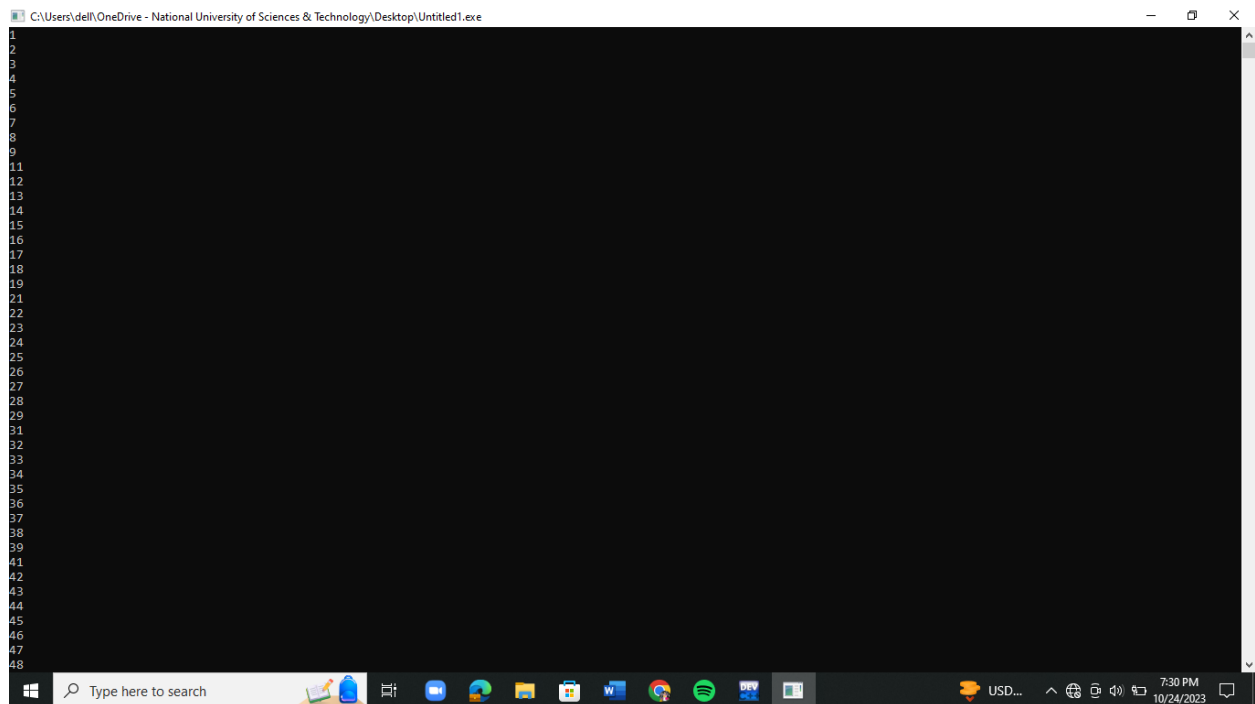


Jonathan Sharif (474228)

Lab Manual 4: Home task

Question 1:

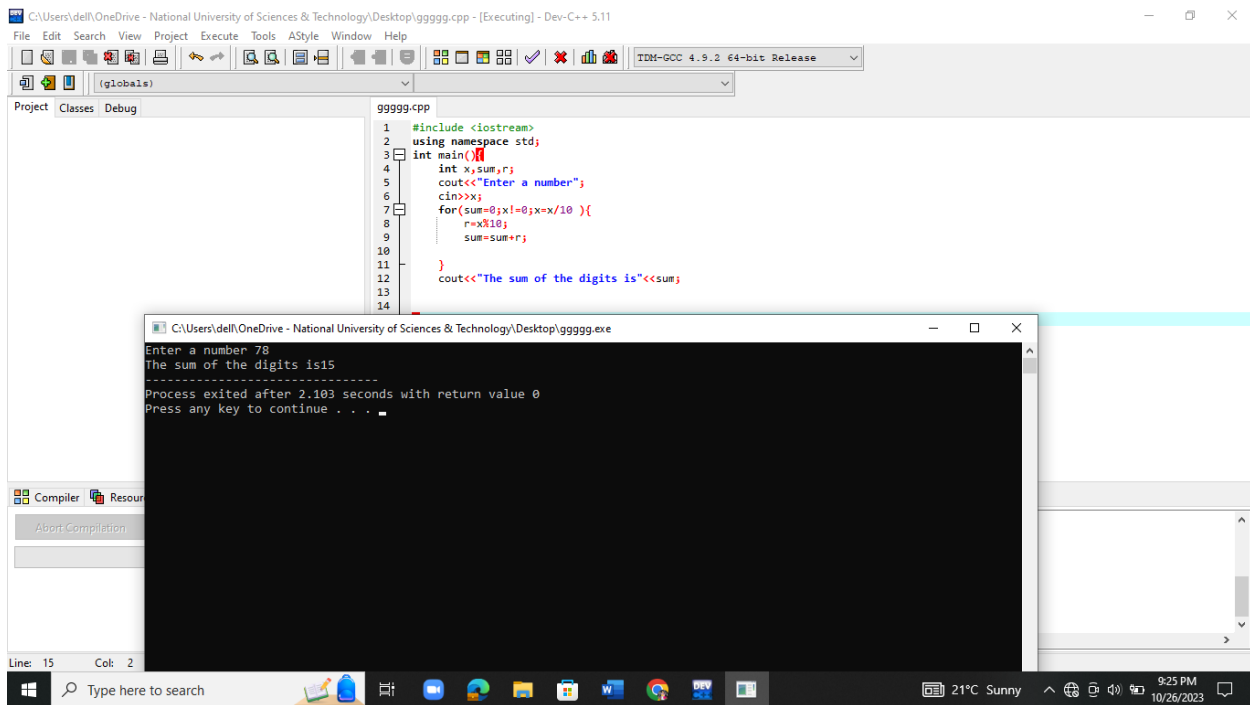
```
1. #include <iostream>
2. using namespace std;
3. int main (){
4.     int y;
5.     for(y=1; y<=150; y++){
6.         if(y%10==0){
7.             continue;
8.         }
9.         else { cout<<y<<endl;
10.    }
11.
12.    }
13.}
```



The screenshot displays a Windows desktop environment. A code editor window, titled 'C:\Users\dell\OneDrive - National University of Sciences & Technology\Desktop\Untitled1.exe', is open, showing the C++ code for Question 1. The code is a program that prints numbers from 1 to 150, skipping multiples of 10. The window has a dark theme. The Windows taskbar is visible at the bottom, featuring a search bar, several application icons (including File Explorer, Microsoft Word, and Chrome), and the system tray showing the time as 7:30 PM on 10/24/2023.

Question 2:

```
1. #include <iostream>
2. using namespace std;
3. int main(){
4.     int x,sum,r;
5.     cout<<"Enter a number";
6.     cin>>x;
7.     for(sum=0;x!=0;x=x/10 ){
8.         r=x%10;
9.         sum=sum+r;
10.
11.     }
12.     cout<<"The sum of the digits is"<<sum;
13.
14.
15. }
```



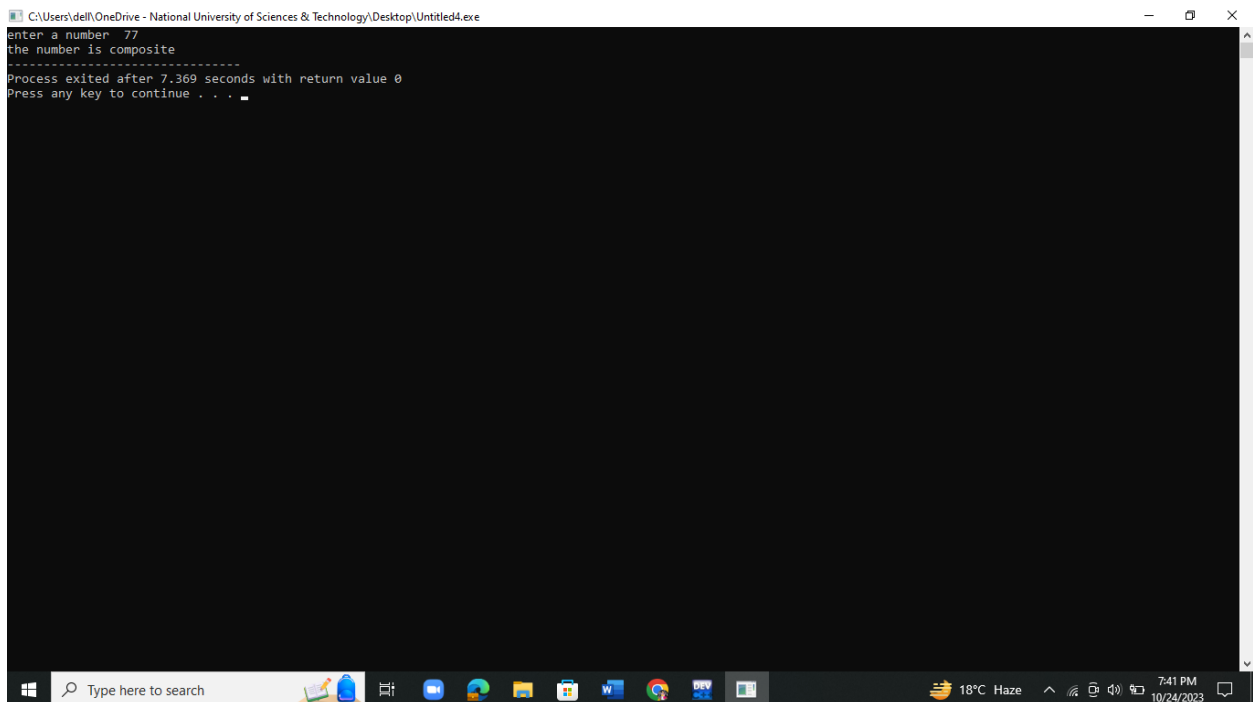
The screenshot shows a C++ IDE with the following components:

- Editor:** Displays the C++ code for calculating the sum of digits. The code is as follows:

```
1 #include <iostream>
2 using namespace std;
3 int main(){
4     int x,sum,r;
5     cout<<"Enter a number";
6     cin>>x;
7     for(sum=0;x!=0;x=x/10 ){
8         r=x%10;
9         sum=sum+r;
10
11     }
12     cout<<"The sum of the digits is"<<sum;
13
14
15 }
```
- Output Window:** Shows the program's execution. It prompts "Enter a number 78", displays "The sum of the digits is15", and indicates the process exited after 2.103 seconds with a return value of 0. It also prompts "Press any key to continue . . .".
- Compiler Output:** Shows "Compiler Resource" and "Abort Compilation".
- Taskbar:** Displays the Windows taskbar with various icons and the system clock showing 9:25 PM on 10/26/2023.

Question 3:

```
1. #include <iostream>
2. using namespace std;
3. int main(){
4.     int x,y,z=0 ;
5.     cout<<"enter a number";
6.     cin>>x;
7.     for(y=1; y<=x; y++){
8.         if(x%y==0){
9.             z++;
10.        }
11.
12.    }
13.    if(z==2){
14.        cout<<"The number is prime";
15.    }
16.    else { cout<<"the number is composite";
17.    }
18.}
```



```
C:\Users\dell\OneDrive - National University of Sciences & Technology\Desktop\Untitled4.exe
enter a number 77
the number is composite
.....
Process exited after 7.369 seconds with return value 0
Press any key to continue . . .
```