NUST

NATIONAL UNIVERSITY
OF SCIENCES & TECHNOLOGY

FUNDAMENTALS OF PROGRAMMING
HOME TASKS # 4 TASKS

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CLASS:ME-15

SECTION:B

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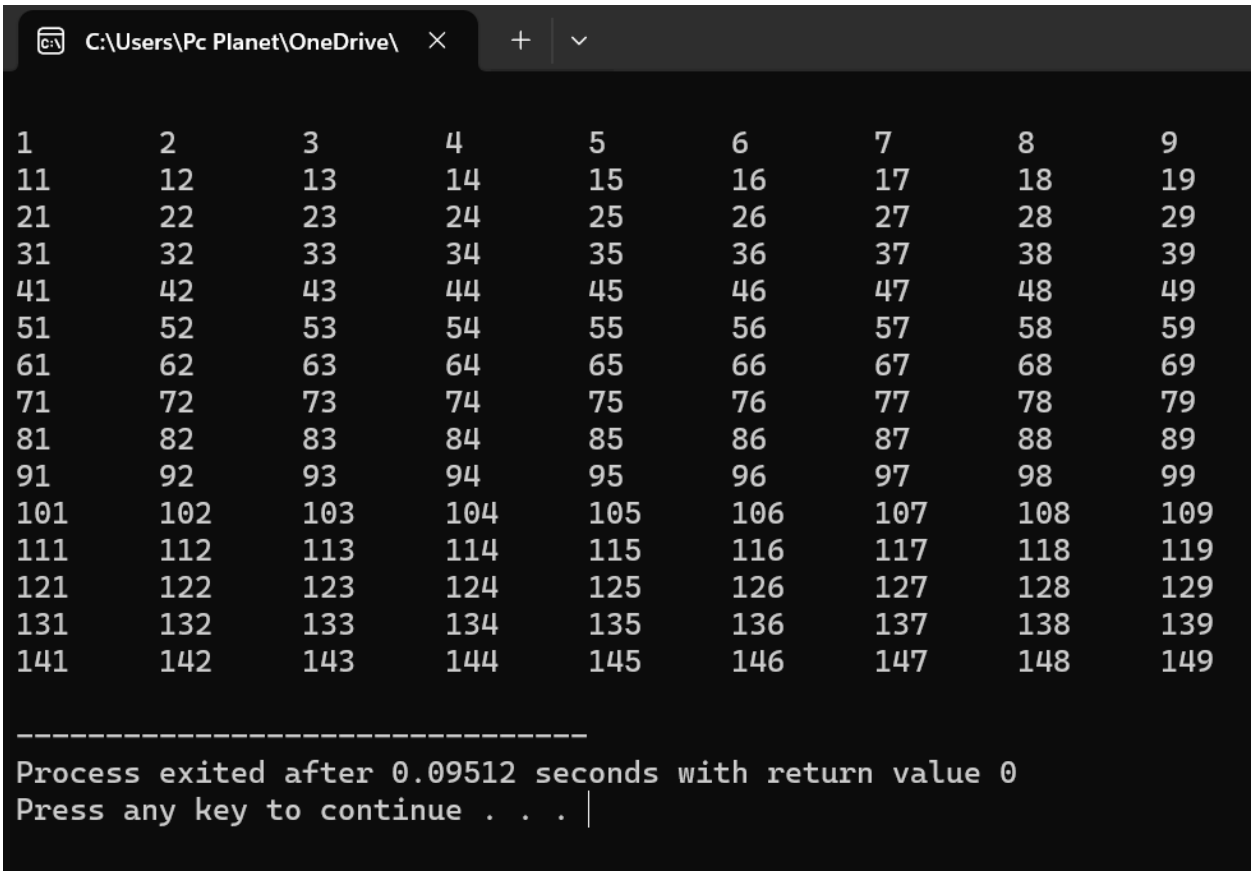
TASK 1

```
#include <iostream>

using namespace std;

int main(){

for(int a;a<=150;a++){

/*we enter an integer ‘a’ and set for loop till value of a reaches 150 and then we incremented vlue of a*/

if(a%10==0){

/*if the number is divisible by 10 do not write it*/

cout<<endl;

continue;

}



cout<<a<<"\t";



}




return 0;

}
```



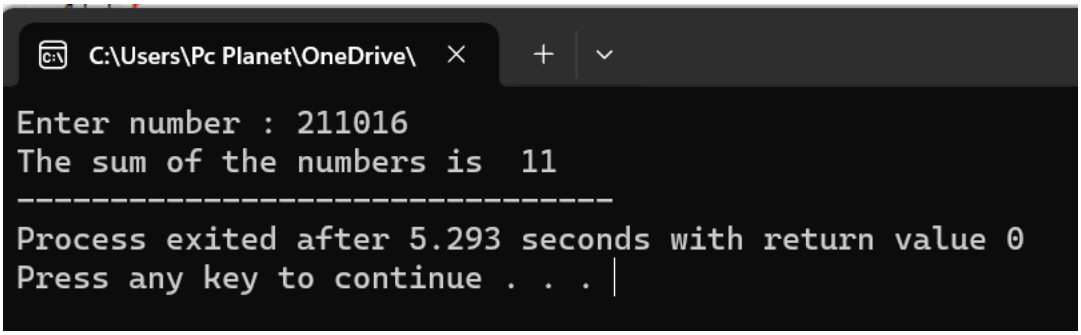
TASK 2

```
#include <iostream>

using namespace stdG;

int main()

{

int num1,sum,num2;

cout<<"Enter number : ";

cin>>num1;

while(num1!=0){
```

/*using while loop until the number becomes zero.First take mod number by 10 then the reminder will be the last digit ,store it .Then we add this number in sum which was originally zero and also add sum .Then divide number by 10 so that it has all the values of the number except the last digit which was

stored in the num2.Repeat the steps until the number has no value left , it is done by dividing it by 10 until the program rounds off the code to floor.*/

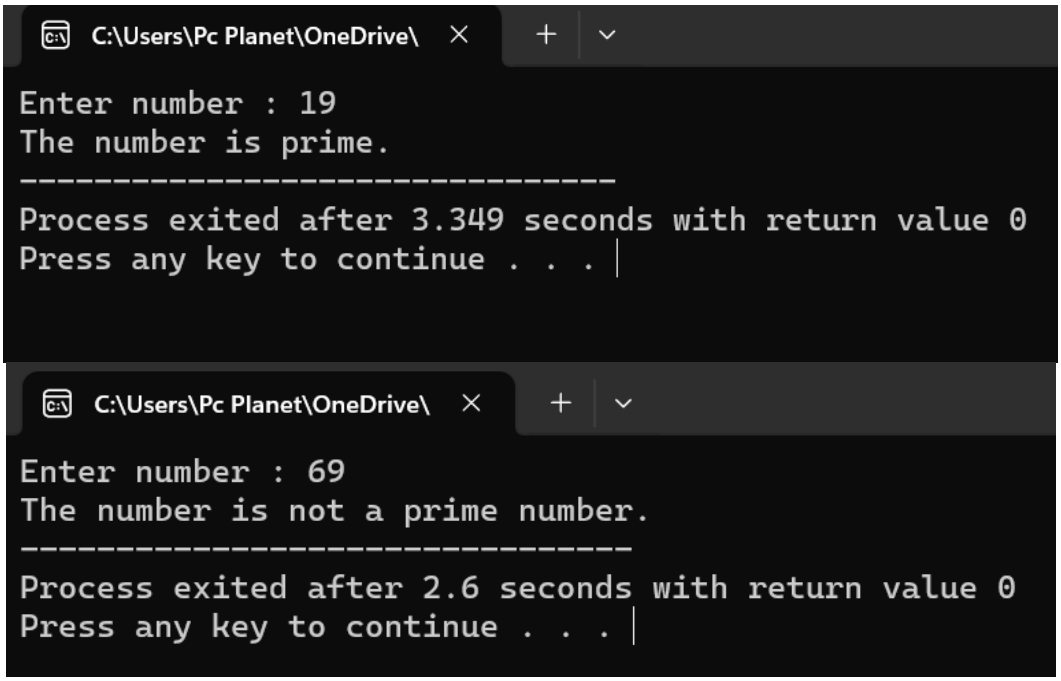
```
num2=num1%10;

sum=sum+num2;

num1=num1/10;

}

cout<<"The sum of the numbers is  "<<sum;




return 0;

}
```



TASK 3

```
#include <iostream>

using namespace std;

int main()

{

bool prime = false;

int n;

cout<<"Enter number : ";
```

```
cin>>n;

for(int d=2;d<=(n/2);++d){

/*using for loop with divider(d) starts from 2 and the loop continues until it is less than or greater than half of the entered number. Then if the number is divided by d and remainder is zero then the condition will be true. Then if number is not 1 and the condition is false then it is prime number else it is not a prime number,*/

if(n%d==0 ){

prime=true;

break;

}

}

if(prime==false && n!=1){

cout<<"The number is prime.";

}

else{

cout<<"The number is not a prime number.";

}




return 0;

}
```


C:\Users\Pc Planet\OneDrive\
Enter number : 19
The number is prime.

Process exited after 3.349 seconds with return value 0
Press any key to continue . . .

C:\Users\Pc Planet\OneDrive\
Enter number : 69
The number is not a prime number.

Process exited after 2.6 seconds with return value 0
Press any key to continue . . .