Computer Systems and Programming
Lab Manual 4 Home Task

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Class: ME-15 C

Q1. Write a program in C++ that prints the numbers from 1 to 150 except the multiples of 10. Make use of the continue statement.

```cpp
#include <iostream>

using namespace std;

int main() {
    for (int i=1; i<=150; i++) {
    if (i % 10 == 0) {
    continue;
    }
    cout << i << endl;
    }
    return 0;
}
```

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Process returned 0 (0x0)   execution time : 0.052 s
Press any key to continue.
```

Q2. Write a C++ program to find the sum of digits of a number.

```cpp
#include <iostream>

using namespace std;
int main() {
    int num, digit, sum=0;
    cout << "Enter your integer" << endl;
    cin >> num;
    while (num>0) {
    digit= num % 10;
    sum += digit;
    num/= 10;
    }
    cout << "The sum of the digits of your number is " << sum << endl;
    return 0;
}
```

```
Enter your integer
39724
The sum of the digits of your number is 25

Process returned 0 (0x0)   execution time : 6.251 s
Press any key to continue.
```

Q3. Write a program in C++ to check whether a number is prime or not.

```cpp
#include <iostream>

using namespace std;

int main() {
    int x;
    cout << "Enter a positive integer" << endl;
    cin >> x;
    if (x<=1) {
    cout << x << " is not a prime number" << endl;
    }
    else {
    int i;
    for (i=2;i*i<=x;i++) {
    if (x % i ==0) {
    cout << x << " is not a prime number" << endl;
    break;
    }
    }
    if (i*i>x) {
    cout << x << " is a prime number" << endl;
    }
    }
    return 0;
}
```

```
Enter a positive integer
20
20 is not a prime number

Process returned 0 (0x0)   execution time : 6.055 s
Press any key to continue.
```

```
Enter a positive integer
37
37 is a prime number

Process returned 0 (0x0)   execution time : 3.372 s
Press any key to continue.
```