National University of Sciences and Technology (NUST) Department of Mechanical Engineering (SMME)



Fundamentals of Programming (FOP)

Home Tasks

Lab Manual 4

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Home Task-1

```
#include <iostream>
using namespace std;
int main() {
    int num,result;
    cout << "printing number 1 to 150 excluding multiples of 10" << endl;
    num=1;
    for(num=1;num<=150;num++) {
        result=num%10;
        if(result==0) {
            continue;
        }
        cout << num << " ";
    }
    return 0;
}</pre>
```

```
printing number 1 to 150 excluding multiples of 10
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
```

Home Task-2

```
#include <iostream>
using namespace std;
int main() {
    int x,y,sum=0;
    cout<<"Enter a number";
    cin>>x;
    while(x>0){
        y=x%10;
        sum=sum+y;
        x=x/10;
    }
    cout<<"The sum of the digits of a number is: "<<sum;
    return 0;
}</pre>
```

```
Enter a number65
The sum of the digits of a number is: 11

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```

Home Task-3

#include <iostream>

```
using namespace std;
int main() {
       int num, i, x = 0;
  cout << "Enter a number: "; cin>>num;
  for (i=1; i<=num;i++)
    if (num% i==0)
      x++;
  if (x==2)
  {
    cout << "This is a Prime number" << endl;</pre>
  }
  else
  {
     cout << "This is not a Prime number" << endl;</pre>
  }
       return 0;
                      a Prime number
                                       number
```