National University of Sciences and Technology (NUST)

Department of Mechanical Engineering (SMME)

Fundamentals of Programming (FOP)

Home Tasks

Lab Manual 6

By

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Home Task-1:

```cpp
#include<iostream>
using namespace std;
int main(){
    int num,count,sum=0;
    for(num = 1;num<=50;num++){
        count = 0;
        for(int i=2;i<=num/2;i++){
            if(num%i==0){
                count++;
                break;
            }
        }
        if(count==0 && num!= 1)
            sum = sum + num;
    }
    cout << "Sum of prime numbers from 1 to 50 is : " <<sum;

    return 0;
}
```

```
Sum of prime numbers from 1 to 50 is : 328
------------------------------
```

Home Task-2:

```cpp
#include<iostream>
using namespace std;
int main() {
    int i,j;
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=5;j++){
            if(j<=i){
                cout<<j<<" ";
            }
            else{
                continue;
            }
        }
        cout<<endl;
    }
    return 0;
}
```

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

Home Task-3:

```cpp
#include<iostream>
using namespace std;
int main() {
    int i,j,k,l;
    for(i=1;i<=4;i++)
    {
        if(i==1){
            cout<<i<<endl;
            continue;
        }
        else{
            for(j=1;j<=6;j++){
                for(k=2;k<=6;k+=2){
                    if(k==j){
                        for(l=1;l<=k;l++){
                            cout<<k<<" ";
                        }
                    }
                    else{
                        continue;
                    }
                    cout<<endl;
                }
            }
            cout<<endl;
        }
    return 0;
    }
}
```

```
1
2 2
4 4 4 4
6 6 6 6 6 6
```