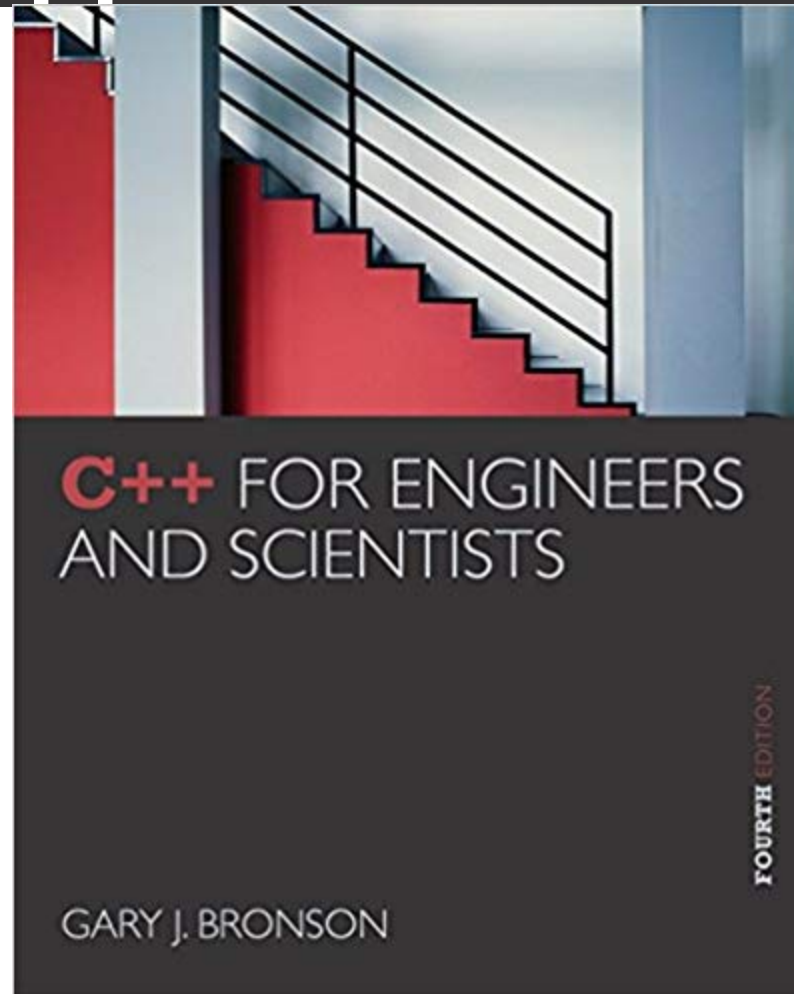


ELEG 1043

Computer Applications in Engineering





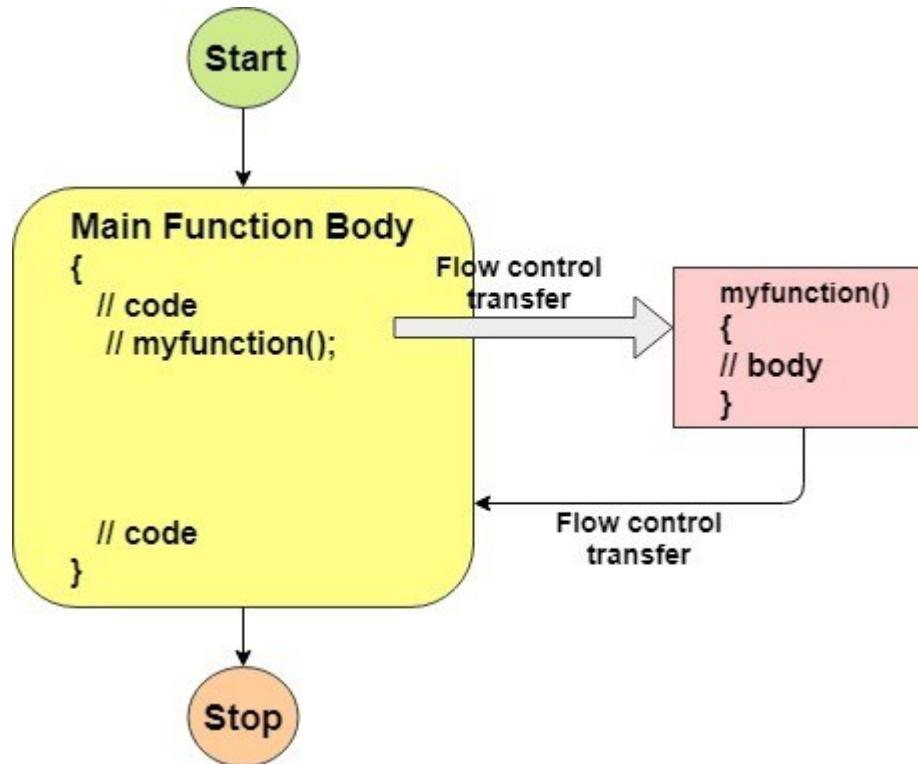
Lab Course 4

C++ FOR ENGINEERS
AND SCIENTISTS ²

Acknowledgement

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Function



Exercise 1

- Write a function that is to add three numbers, and call this function in **main** function.

Answer

```
#include <iostream>

using namespace std;

//Called Function
int add(int num1, int num2, int num3)
{
    int sum = num1 + num2 + num3;
    return sum;
}

//Calling Function
int main()
{
    int num1 = 1, num2 = 2, num3 = 5;
    int sum = add(num1, num2, num3);
    cout<<"the value is "<<sum<<endl;
    return 0;
}
```

Exercise 2

- Write two functions with **Function Overloading Technique**. One function is to add two integer numbers, and the other is to add two double numbers.

Answer

```
#include <iostream>

using namespace std;

int add(int num1, int num2){
    int value = num1 + num2;
    return value;
}

double add(double num1, double num2){
    double value = num1 + num2;
    return value;
}

int main(){
    int num1 = 1, num2 = 2;
    cout<<add(num1, num2);
    double dnum1 = 0.1, dnum2 = 0.3;
    cout<<add(dnum1, dnum2);
}
```


Exercise 3

- Write a function that is to swap two numbers, and call this function in **main** function.

Answer

```
#include <iostream>

using namespace std;

void swapnum(int &i, int &j) {
    int temp = i;
    i = j;
    j = temp;
}

int main(void) {
    int a = 10;
    int b = 20;
    cout<<"A is "<<a<<" and B is "<<b<<endl;
    swapnum(a, b);
    cout<<"After swapping two numbers"<<endl;
    cout<<"A is "<<a<<" and B is "<<b<<endl;
    return 0;
}
```