

# C++ Variables and Data Types

## Assignment Questions

**Q1 - Take 2 integer values in two variables x and y and print their product**

```
#include<iostream>

using namespace std;

int main() {

    int x = 23;

    int y = 50;

    cout << x*y << endl;

    return 0;

}
```

**Q2 - Print the ASCII value of character 'U'.**

```
#include<iostream>

using namespace std;

int main() {

    cout << "ASCII value of u is " << (int)'U' << endl;

    return 0;

}
```

**Q3 - Write a C++ program to take length and breadth of a rectangle and print its area.**

```
#include <iostream>

using namespace std;

int main() {

    int length=10;

    int breadth=20;

    cout <<"Lenght " << length << endl; cout<< "Breadth" << breadth << endl;

    int area = length*breadth;

    cout << "Area is " << area << endl;

    return 0;

}
```

#### Q4 - Write a C++ program to calculate the cube of a number.

```
#include<iostream>

using namespace std;

int main() {

    int x = 2; int cube;

    cout << "number is " << x << "cube of the number is " << x*x*x << endl;

    return 0;

}
```

#### Q5 - Write a C++ program to find size of basic data types.

```
#include<iostream>

using namespace std;

int main() {

    cout << "\nSize of fundamental data types :\n";

    cout << " The sizeof(char) : " << sizeof(char) << " bytes \n" ;

    cout << " The sizeof(short) : " << sizeof(short) << " bytes \n" ;

    cout << " The sizeof(int) : " << sizeof(int) << " bytes \n" ;

    cout << " The sizeof(long) : " << sizeof(long) << " bytes \n" ;

    cout << " The sizeof(long long) : " << sizeof(long long) << " bytes \n";

    cout << " The sizeof(float) : " << sizeof(float) << " bytes \n" ;

    cout << " The sizeof(double) : " << sizeof(double) << " bytes \n";

    cout << " The sizeof(long double) : " << sizeof(long double) << " bytes \n";

    cout << " The sizeof(bool) : " << sizeof(bool) << " bytes \n\n";

    return 0;

}
```

#### Q6 - Write a C++ program to swap two numbers with the help of a third variable.

```
#include<iostream>

using namespace std;

int main() {

    cout << "\n\n Swap two numbers :\n";

    cout << "-----\n";

}
```

```
int n1 = 2, n2 = 5, temp;
cout << " Before swapping the 1st number is : "<< n1 << "\n" ;
cout << " Before swapping the 2nd number is : "<< n2 << "\n" ;
temp=n2; n2=n1; n1=temp;
cout << " After swapping the 1st number is : "<< n1 << "\n" ;
cout << " After swapping the 2nd number is : "<< n2 << "\n" ;
return 0;
}
```