

### Assignment for Week 3

1. P93-95 Debugging Exercises 4.1—4.4
2. Read the following program and determine the output.

1)

```
#include<iostream>
using namespace std;
int print(int i){return i*i;}
double print(double d){return 2*d;}
void main()
{
    int a=25;
    float b=9.2;
    double d=3.3;
    char c='a';
    short i=3;
    long l=9;
    cout<<print(a)<<endl<<print(b)<<endl<<print(d)<<endl;
    cout<<print(c)<<endl<<print(i)<<endl<<print(l)<<endl;
}
```

2)

```
#include<iostream.h>
double f(int a=10,int b=20,int c=5) {return a*b*c;}
void main( )
{
    cout<<f( )<<endl<<f(20)<<endl<<f(10,10)<<endl<<f(10,10,10)<<endl;
}
```

3. The effect of a default argument can be alternatively achieved by overloading. Discuss with an example.
4. Write a function **power( )** to raise a number **m** to a power **n**. The function takes a **double** value for **m** and **int** value for **n**, and returns the result correctly. Use a default value of 2 for **n** to make the function to calculate squares when this argument is omitted. Write a **main** that gets the value of **m** and **n** from the user to test the function.
5. Write a function that performs the same operation as that of exercise 4 but takes an **int** value for **m**. Both the functions should have the same name. Write a **main** that calls both the functions. Use the concept of function overloading.

✧ Note:

Submit your assignment with the name of “Student\_ID\_3.pdf” before the end of this week to the E-mail address [computers2015@163.com](mailto:computers2015@163.com)