1. List the four main principles of Object Oriented Programming and describe each one in a sentence.

2. Consider a class that contains a private float variable named ***_secret***. Write an **Accessor** function to get the value of ***_secret*** and a **Mutator** function to change the value of ***_secret***.

3. Specify if the type of class variables (Private, Protected, or Public) that each item can access.

   Member Functions of a class
   Friend Functions of a class
   Functions of a derived class
   Friend Functions of a derived class
   Functions of a unrelated class
   The main function in a program

4. Consider a class the holds a fraction with a numerator and denominator. Provide the declaration for the following operator overloads, do not implement the functions.

   operator+ for the addition of two fraction objects
   operator – for the subtraction of one fraction object from another
   operator* for multiplying two fraction objects
   operator* for multiplying a fraction object by an integer

5. What does the keyword virtual mean in the context of a class?

6. What is an abstract class? How would you modify this class to make is an abstract class?

```
class Base
{
public:
    Base() {_data = 0;}
    virtual void Test() {}
private:
    int _data;
};
```

7. A class named ***Foo*** needs to have two constructors, a default constructor and constructor that takes as input an integer. Provide the declaration for these two constructors.

8. What is the correct declaration for the destructor of a class named ***Foo***?

9. For the purposes of inheritance, should Destructors be made virtual? If so why, if not, why not?

10. What is object slicing and how does it occur?