7.8.09

1. Which of these identifiers would you use for your programs in this class?

N*3	totalprice	Total_Price	total-price
3s_Company		hourlyPay	Spock
double	i	my name	temp	the_11th_hour

2. What are reserved words?
3. Determine the data type, identifier, and initial value:
    a. const int total = 0;
    b. string name = “Picard”;
    c. double myValue;

7.13.09

1. Fill in the two methods:

```
double    box_surface_area(double length, double width, double height)
{
      return (2*length * width + 2* length * height +2* height * width);
}
double    box_volume (double length, double width, double height)
{
       return
}
```

2. Does the following function work correctly?

```
double     cube_surface_area (double side)
{
      return     box_surface_area ( side, side, side ) ;
}
```

3. Find any errors:

```
int main {
      int payment;
      payment = int(monthlyPayment());
      cout << 'Payment is: ' << payment;
      return 0;
}
```

```
double monthlyPayment()
{
            double toPay;
      toPay = ( .06 + (.06 / ( ( 1.06 ) ^ 10 - 1 ) ) )*2500;
      return toPay;
}
```

7.14.09

```
                        11111111112
              01234567890123456789O
string  x =  "Live Long and Prosper";
string  y =  "Rules of Acquisition";
```

Find the error or state what is printed out.

1. cout << x.find("Long");
2. cout << x.length() – y.size();
3. cout << y.substr(0, 8);
4. x = x.substr (x.find(" ") + 1, 16) ;
   cout << x;

7.15.09

1. What is the output with the following input stream and code?
Input stream:

```
string input;
cin >> input;
cout << input << endl;
getline(cin,input);
cout << input << endl;
```

2. What is the output of the following code?
Input stream: `3 6 8 2 9`

```
int min;
int readInt;
cin >> readInt;
min = readInt;
cin >> readInt;
if ( readInt < min)
{
    cout << "Found New Min: "<< readInt << endl;
    min = readInt;
}
cout << "Finished";
```

7.16.09

1. Find the error getting the second token:

```
    string inputLine = "BowlingFrames 8 10 16 33 56 61 69 73 81 90";
    string nextToken;
    int nextSpace = inputLine.find(" ");
    int length = inputLine.length();
    nextToken = inputLine.substr(0,nextSpace);
    inputLine = inputLine.substr(nextSpace+1, length-nextSpace);
    cout << "nextToken: " << nextToken << endl << endl;

    nextSpace = inputLine.find(" ");
    length = inputLine.length();
    nextToken = inputLine.substr(0,nextSpace);
    inputLine = inputLine.substr(nextSpace+1, length-nextSpace);
    cout << "nextToken string: " << nextToken << endl;
```

2. Find the errors in reading two lines from a file.

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
    ifstream In;
    In.open( "inputs.txt");
    string text;
    getline(In, text);
    cout << text << endl;
    getline(In, text);
    cout << text << endl;
    In.close();
        return 0;
}
```

7.20.09
1. Determine which blocks are executed.

```
int a=0, b=1, c=2, d=3;

if( a < b && c > d )
    //Block 1
else if( a < d || 10 < d )
    //Block 2
else
    //Block 3

if( !( a >= d ) && c > d )
    //Block 4
else if( a == 0 )
    //Block 5
else
    //Block 6
```