Problem 3

1. Why are the following lines of code considered as bad style and how could they be improved? (3p.)

```
1 const int size = 100;
```

```
1 int Fib( int n )
2 {
3     if( n==1 || n==2 )
4         return 1;
5     int i = 3;
6     int fib = 1;
7     int prev_fib = 1;
```

```
1 int main() {
2   char answer;
3   while( answer != 'Q' ) {
4     cin >> answer;
5     ...
```

2. How can logical errors be located in the code? Use examples. (3p.)

(6p.)

Problem 4

1. Compare
   `input_stream >> data;`
   and
   `getline( input_stream, data );` (2p.)

2. You need a program to keep track of your DVD collection. Describe the data structures and types you would use to store the DVDs. The name, publishing year and genre is known for each movie. The genre can be horror, action, drama or comedy. The movies are sorted based on their genre and within the genre alphabetically. Explain how you would implement the sorting. (4p.)

(6p.)

CONTINUES!