NetID: xinran2 QuizID: 78454 Score: 3 / 5 Answer Source: Manual Input from Quiz Sheet

{{{questionNumber}}}. Consider this simple example.

```
int * p;
int i;
i = 37;
*p = i;
*p = 99;
cout << i << endl;
```

What is the result of executing these statements, assuming that `iostream` is included?

A. [Your Answer] `37` is sent to standard out.
B. This code does not compile.
C. [Correct Answer] This code results in undefined runtime behavior.
D. This code has a memory leak.,
E. `99` is sent to standard out.
F. None of the other options describes the behavior of this code.

{{{questionNumber}}}. Which of the following is a correct way to initialize the variable named `NCC1701` to be a dynamic array of `starShip` pointers with size `size`?

A. None of the other answers are correct initializations for `NCC1701`.
B. `starShip * NCC1701[size];`
C. `NCC1701 = new starShip[size];`
D. `starShip * [size] NCC1701;`
E. [Correct Answer] [Your Answer] `NCC1701 = new starShip *[size];`
F. `for (int i = 0; i < size; i++) NCC1701[i] = new starShip *;`

{{{questionNumber}}}. Consider this simple example

```
#include <iostream>
using namespace std;

class winterfell {
public:
   winterfell(const string & s ): text(s) {};
   char & operator()(int position) { return text[position];}
private:
    string text;
};

int main() {
   winterfell t("Winter Is Coming!");
   for(int i = 0; i < 17; i++)
       // your code here!
   return 0;
}
```

Which of the following statements complete the code so that the output is `"Winter Is Coming!"`?

A. `cout << t[i];`
B. [Correct Answer] [Your Answer] `cout << t(i);`
C. `cout << t;`
D. `cout << text[i];`
E. More than one of the other options is correct.

{{{questionNumber}}}. Consider this simple example.

```
int * a;
int * b;
b = new int(5);
a = b;
*a = 9;
cout << *b << endl;
delete b;
a = NULL;
b = NULL;
```

What is the result of executing these statements if you assume the standard `iostream` library has been included?

A. `5` is sent to standard out and no memory is leaked.
B. None of the other options describes the behavior of this code.
C. [Correct Answer] `9` is sent to standard out and no memory is leaked.
D. [Your Answer] This code has a memory leak.
E. This code results in undefined runtime behavior.
F. The memory address of `b` is sent to standard out.

{{{questionNumber}}}. Which of the following concepts is mentioned in the Rule of the Big Three?

A. header file
B. default constructor
C. None of these concepts is mentioned in the rule.
D. [Correct Answer] [Your Answer] copy constructor
E. compilation
F. encapsulation