CPS235 Object Oriented Programming in C++

LAB QUIZ

Question 1: Look at the following examples and write your answer in the column next to the example

```char o[] = "Henry";```
 	
```char* l = o;```
 	
```o[0] = 'D';```
	```after executing```
	
	```l = _____```
	
	```o = _____```

```char* o = "The rain in Spain falls mainly on the plain."```
 	
```char* p = "Hello, World!";```
 	
```o[12]=p[0];```
 	
```p[7] = o[12];```
	```after executing```
	
	```o = _____```
	
	```p = _____```

```
struct Student
    {
        string name;
        int id;
        int marks[3];
    };
```

(a) Write a function **void initStudent(Student* ptr)** which initializes the data members of the Student instance pointed to by ptr to the following values:

> Name = <your own name>
> Id = <your nust id>
> marks[0],marks[1],marks[2] = <your marks in OOP, DLF and AP>

(b) Write a function **void display(Student* ptr)** which displays the Student instance pointed to by ptr.

(c) How will you call these functions from within **main()** ?

Question 2: What is the following function doing?

```
bool mystery(char *p, char *q)
{
    while (*p != '\0' && *q != '\0')
    {
        if (*p < *q)
            return true;
        if (*p > *q)
            return false;
        p++;
        q++;
    }

    if (*p == '\0' && *q != '\0')
        return true;
    else
        return false;
}
```

Question 3: What is the output of the following program?

```
#include <iostream.h>
#include<conio>
int main(void) {
    int a[] = {1, 2, 3, 4, 5};
    int * p = a + 1;
    p++;
    cout << a[1];
    cout << *(p+2);
    cout << *(a+2);
    cout << p[1] << endl;
getch();
    return 0;
}
```