1. Write a program that fills an array of size 20 with anywhere from 5 to 20 random numbers in the range 0 - 50. Then, the program should go through the array, counting how many even and odd numbers were entered. Output should show the original values entered (8 per line), the count of even numbers and the count of odd numbers. There should be 4 separate functions to fill the array, find the number of odds & evens (one function), display the contents of the array, and display the number of odds & evens. HINT: You will need to use a separate variable to hold a random number that indicates how many values will be put in the array. That number should be generated in the function that fills the array.

SAMPLE RUN:

```
Filling the array...


Counting odds & evens...


Values in the arrray...
1 18 31 1 4 33 4 44
15 11 23 32 39 26 1 0
11

Odd/even count...
Odds:   10
Evens:  7

Process returned 0 (0x0)   execution time : 0.137 s
Press any key to continue.
```

2. Write a program that uses parallel arrays to keep track of 5 courses. Each course will have a discipline code (like MTH or CS), a course number (use only integers), and a course title (like "Computer Science I"). There should be 5 functions:

1. intro ( ) - instructions about what is coming up
2. void fillCourses(..... with parameters for the 3 arrays ....)
3. int courseSearch(.... with parameter for the courses array and for a course title ....) - the function returns -1 if the course title is not found; otherwise, it returns the element number of the array where the course title was found (There should be a prompt and input in the main() function, where the user enters a course title.)
4. void showCourses(.... with parameters for the 3 arrays ...)
5. void showOneCourse(... with parameters for the 3 arrays and for the element number of where the course searched for is found) - displays the discipline and course number of the course searched for.

SAMPLE RUNS:

```
COURSE LISTING AND SEARCH

Enter the courses...
discipline: CS
course number: 161
course title: Computer Science I
discipline: MTH
course number: 251
course title: Calculus I
discipline: COMM
course number: 111
course title: Public Speaking

What course title shall I search for? Calculus I

That course is MTH 251

All courses:
CS    161   Computer Science I
MTH   251   Calculus I
COMM  111   Public Speaking


Process returned 0 (0x0)   execution time : 45.685 s
Press any key to continue.
```

```
COURSE LISTING AND SEARCH

Enter the courses...
discipline: CS
course number: 161
course title: Computer Science I
discipline: MTH
course number: 251
course title: Calculus I
discipline: COMM
course number: 111
course title: Public Speaking

What course title shall I search for? Computer Science I

That course is CS 161

All courses:
CS    161   Computer Science I
MTH   251   Calculus I
COMM  111   Public Speaking


Process returned 0 (0x0)   execution time : 29.881 s
Press any key to continue.
```