1. Write a program that will display the effects of an earthquake based on the Richter scale values shown below. The program should read the Richter scale value from the user and display the appropriate effects:

Richter scale value	Effect
Less than 4	Little
4.0-4.9	Windows shake
5.0-5.9	Walls crack; poorly built buildings are destroyed
6.0-6.9	Chimneys tumble, some buildings are destroyed
7.0-7.9	Well-built buildings are damaged
More than 7.9	Most buildings are destroyed

2. Write a java program to implement the following pseudocode:

```
DO
        GET age of person
        IF age of person is over 18
                ADD 10 to total price
        ElSE IF person is under 18
                ADD 5 to total price
WHILE there is another person in the group

DISPLAY total price
```

3. Write a Java program using the switch statement that will accept a month number (1 to 12) and will display the season on screen. (Take May, June and July as summer). Sample output:

```
Enter a month number [1-12]:  4
It is spring.
```

4. Write a java program that allows the user to repeatedly order from a Pizza menu until they choose to exit. The menu should offer three types of pizza – Margherita, Hawaiian and Vegetarian. The program should count the number of each type of pizza in the order.

5. Modify this program so that a Margherita pizza costs €10, a Hawaiian pizza costs €12 and an Vegetarian pizza costs €9.50. The program should calculate and display the total cost of the order.

6. Write a program that uses parallel arrays to store the names and populations of the 7 continents. The program should print out details of all continents, and their population. If the population is over 1 billion, the message "Heavily Populated" should be displayed.

7. The following piece of Java code will generate a random number between 0 and 9.

```
Random noGenerator = new Random();
//declare variable to store random no btw 0 and 9
int randomNumber;
randomNumber = noGenerator.nextInt(10);
```

Create a program which simulates a number guessing game. The program should generate a random number between 1 and 100. The program will then repeatedly ask the user to guess the number. Each time player's guess is incorrect, the program will report whether the guess is too high or too low. The program will end by displaying the number of turns it took to guess the answer. Sample output:

```
Please enter your guess: 3
Incorrect - higher..
Please enter your guess: 90
Incorrect - lower..
Please enter your guess: 55
Incorrect - lower..
Please enter your guess: 23
Well done.  You got it in 4 turns.
```