

Q1: explain what would happen if we didn't have a break in the cases of the switch statement. Describe how the program would behave.

The program would evaluate the input "x" against the various cases. If any of the cases were true it would do whatever the action of that case entailed. In this example it would print a statement "X is some number".

It would then continue to the next case and apply that action as well until it reached the end of the switch. If there was a break in any of the following case statements the program would break there.

Q2: Write an equivalent if/else to match not having any breaks in the above switch/case.

The output of the following if/else statement is equivalent to that of the switch/case statements assuming the switch/case statement used no breaks.

```
int x = 0; //put the number you want to test here.  
  
if (x == 0)  
    System.out.printf("X is zero\n");  
if (x <= 1)  
    System.out.printf("X is one\n");  
if (x <= 2)  
    System.out.printf("X is two\n");  
//else  
    System.out.printf("You have entered an invalid number!!!\n");
```