1. What gets printed? Please show all the output as it will appear, OR indicate “NO OUTPUT”, OR show the first 3 lines of output followed by “INFINITE LOOP.”

```java
for (int size = 0; size < 10; size += 2)
{
    System.out.print(size + " => ");
    // CAREFUL! missing break statements!
    switch(size)
    {
        case 0:
            System.out.print ("X");
        case 2:
            System.out.println ("X");
        case 4:
            case 6:
            System.out.println ("S");
                break;
        case 8:
            System.out.println ("M");
                break;
        case 10:
            case 12:
            System.out.println ("L");
    }
}
```

```java
int a = 4; 

do
{ 
    System.out.println(a);
    a--;
}
while (a < 0);
```

2. Suppose your code has already calculated the value of num as the number of dimes to give out as change. Rewrite the following output statement using the conditional operator, so that it prints “1 Dime” instead of “1 Dimes” in cases where num = 1.

```java
System.out.println ("Your change is " + num + "Dimes");
```

```java
System.out.println ("Your change is 
    + num  
    + "Dime"
    + (num != 1? "s" : "));
```
1. What gets printed? Please show all the output as it will appear, OR indicate “NO OUTPUT”, OR show the first 3 lines of output followed by “INFINITE LOOP.”

```java
int a = 8;

for (int size = 0; size < 5; size ++)
{
    System.out.print(size + " => ");
    // CAREFUL! missing break statements!
    switch(size)
    {
        case 0:
            System.out.print ("A");
            break;
        case 1:
            System.out.println ("B");
        case 2: case 3:
            System.out.println ("C");
            break;
        default:
            System.out.println ("E");
    }
}
```

Output: 0 => A 1 => B C 2 => C 3 => C 4 => E

2. Rewrite the following code to use the conditional operator to compute the value of the variable sign (instead of if/else):

```java
int a = rand.nextInt(100);
String sign;

if (a < b)
    sign = “negative”;
else
    sign = “positive or zero”;

int sign = (a < 0? “negative” : “positive or zero”);
```