1. Given the following method, how many lines contain compilation errors? (Choose all that apply.)

```
private DayOfWeek getWeekDay(int day, final int thursday) {
    int otherDay = day;
    int Sunday = 0;
    switch(otherDay) {
       default:
       case 1: continue;
       case thursday: return DayOfWeek.THURSDAY;
       case 2: break;
       case Sunday: return DayOfWeek.SUNDAY;
       case DayOfWeek.MONDAY: return DayOfWeek.MONDAY;
    }
    return DayOfWeek.FRIDAY;
}
```

A. None, the code compiles without issue.
B. 1
C. 2
D. 3
E. 4
F. 5
G. 6
H. The code compiles but may produce an error at runtime.

2. Given:
```
public class Flipper {
    public static void main(String[] args) {
        String o = "-";
        switch("FRED".toLowerCase().substring(1,3)) {
            case "yellow":
                o += "y";
            case "red":
                o += "r";
            case "green":
                o += "g";
        }
        System.out.println(o);
    }
}
```

What is the result?
A. -
B. -r
C. -rg
D. Compilation fails
E. An exception is thrown at runtime

3. Given:
```
public class Flip2 {
    public static void main(String[] args) {
        String o = "-";
        String[] sa = new String[4];
```

```
            for(int i = 0; i < args.length; i++)
                sa[i] = args[i];
            for(String n: sa) {
                switch(n.toLowerCase()) {
                    case "yellow": o += "y";
                    case "red": o += "r";
                    case "green": o += "g";
                }
            }
            System.out.print(o);
        }
    }
```

And given the command-line invocation:
Java Flip2 RED Green YeLLow

Which are true? (Choose all that apply.)
A. The string rgy will appear somewhere in the output
B. The string rgg will appear somewhere in the output
C. The string gyr will appear somewhere in the output
D. Compilation fails
E. An exception is thrown at runtime

4. Given:
```
1. class Loopy {
2.     public static void main(String[] args) {
3.         int[] x = {7,6,5,4,3,2,1};
4.         // insert code here
5.             System.out.print(y + " ");
6.         }
7.     }
8. }
```
Which, inserted independently at line 4, compiles? (Choose all
that apply.)
A. for(int y : x) {
B. for(x : int y) {
C. int y = 0; for(y : x) {
D. for(int y=0, z=0; z<x.length; z++) { y = x[z];
E. for(int y=0, int z=0; z<x.length; z++) { y = x[z];
F. int y = 0; for(int z=0; z<x.length; z++) { y = x[z];

5. Given:
```
3. public class Ebb {
4.     static int x = 7;
5.     public static void main(String[] args) {
6.         String s = "";
7.         for(int y = 0; y < 3; y++) {
8.             x++;
9.             switch(x) {
10.                 case 8: s += "8 ";
11.                 case 9: s += "9 ";
12.                 case 10: { s+= "10 "; break; }
13.                 default: s += "d ";
14.                 case 13: s+= "13 ";
15.             }
16.         }
17.         System.out.println(s);
```

```
18.    }
19.    static { x++; }
20. }
```
What is the result?
A. 9 10 d
B. 8 9 10 d
C. 9 10 10 d
D. 9 10 10 d 13
E. 8 9 10 10 d 13
F. 8 9 10 9 10 10 d 13
G. Compilation fails

6. Given:
```
3. public class Circles {
4.    public static void main(String[] args) {
5.          int[] ia = {1,3,5,7,9};
6.          for(int x : ia) {
7.               for(int j = 0; j < 3; j++) {
8.                    if(x > 4 && x < 8) continue;
9.                    System.out.print(" " + x);
10.                   if(j == 1) break;
11.                   continue;
12.               }
13.               continue;
14.          }
15.    }
16. }
```

What is the result?
A. 1 3 9
B. 5 5 7 7
C. 1 3 3 9 9
D. 1 1 3 3 9 9
E. 1 1 1 3 3 3 9 9 9
F. Compilation fails

7. Given:
```
3. public class Wind {
4.    public static void main(String[] args) {
5.          foreach:
6.          for(int j=0; j<5; j++) {
7.               for(int k=0; k< 3; k++) {
8.                    System.out.print(" " + j);
9.                    if(j==3 && k==1) break foreach;
10.                   if(j==0 || j==2) break;
11.               }
12.          }
13.    }
14. }
```

What is the result?
A. 0 1 2 3
B.1 1 1 3 3
C. 0 1 1 1 2 3 3
D. 1 1 1 3 3 4 4 4
E. 0 1 1 1 2 3 3 4 4 4
F. Compilation fails

8. What Given the code snippet:

```
String s = "bob";
String[] sa = {"a", "bob"};
final String s2 = "bob";
StringBuilder sb = new StringBuilder("bob");
// switch(sa[1]) { // line 1
// switch("b" + "ob") { // line 2
// switch(sb.toString()) { // line 3
// case "ann": ; // line 4
// case s: ; // line 5
// case s2: ; // line 6
}
```

And given that the numbered lines will all be tested by un-commenting one switch statement and one case statement together, which line(s) will FAIL to compile? (Choose all that apply.)
A. line 1
B. line 2
C. line 3
D. line 4
E. line 5
F. line 6
G. All six lines of code will compile

9. Which statements about the following code snippet are correct? (Choose all that apply.)

```
for(var penguin : new int[2])
   System.out.println(penguin);

var ostrich = new Character[3];
for(var emu : ostrich)
   System.out.println(emu);

List parrots = new ArrayList();
for(var macaw  : parrots)
   System.out.println(macaw);
```

A. The data type of penguin is Integer.
B. The data type of penguin is int.
C. The data type of emu is undefined.
D. The data type of emu is Character.
E. The data type of macaw is undefined.
F. The data type of macaw is Object.
G. None of the above, as the code does not compile

10.   What distinct numbers are printed when the following method is executed? (Choose all that apply.)

```
private void countAttendees() {
    int participants = 4, animals = 2, performers = -1;

    while((participants = participants+1) < 10) {}
    do {} while (animals++ <= 1);
    for( ; performers<2; performers+=2) {}
```

```
        System.out.println(participants);
        System.out.println(animals);
        System.out.println(performers);
}
```

A. 6
B. 3
C. 4
D. 5
E. 10
F. 9
G. The code does not compile.
H. None of the above