

1.Which type of loop is best known for its boolean condition that controls entry to the loop?

- A. do-while loop
- B. for (traditional)
- C. for-each
- D. while

2.Which type of loop is best known for using an index or counter?

- A. do-while loop
- B. for (traditional)
- C. for-each
- D. while

3.Which type of loop is guaranteed to have the body execute at least once?

- A. do-while loop
- B. for (traditional)
- C. for-each
- D. while

4.What keyword is used to end the current loop iteration and proceed execution with the next iteration of that loop?

- A. break
- B. continue
- C. end
- D. skip

5.What does the following code output?

```
String letters = "";  
while (letters.length() != 2)  
letters+="a";  
System.out.println(letters);
```

- A. aa
- B. aaa
- C. The loops complete with no output.
- D. This is an infinite loop.

6. What keyword is used to proceed with execution immediately after a loop?

- A. break
- B. continue
- C. end
- D. skip

7. What does the following code output?

```
int singer = 0;
while (singer)
System.out.println(singer++);
```

- A. 0
- B. The code does not compile.
- C. The loops complete with no output.
- D. This is an infinite loop.

8. What does the following code output?

```
int singer = 0;
while (singer > 0)
System.out.println(singer++);
```

- A. 0
- B. The code does not compile.
- C. The loops completes with no output.
- D. This is an infinite loop.

9. What does the following code output?

```
String letters = "";
while (letters.length() != 3)
letters+="ab";
System.out.println(letters);
```

- A. ab
- B. abab
- C. The loop completes with no output.
- D. This is an infinite loop.

10. What is the result of the following?

```
int k = 0;
for (int i = 10; i > 0; i--) {
    while (i > 3)
    {i -= 3;}
    k += 1;
}
System.out.println(k);
```

- A. 1
- B. 2
- C. 3
- D. 4

11. Which of the following is equivalent to this code snippet given an array of String objects?

```
for (int i=fun.length-1; i>=0; i--)
System.out.println(fun[i]);
```

- A. for (String f = fun) System.out.println(f);
- B. for (String f : fun) System.out.println(f);
- C. for (String f fun) System.out.println(it);
- D. None of the above

12. What is the output of the following?

```
StringBuilder builder = new StringBuilder();
String str = new String("Leaves growing");
do {
    System.out.println(str);
}
while (builder);
System.out.println(builder);
```

- A. Leaves growing
- B. This is an infinite loop.
- C. The code does not compile.
- D. The code compiles but throws an exception at runtime.

13. What is the result of the following code?

```
6:   int count = 0;
7:   do {
8:     do {
9:       count++;
10:    } while (count < 2);
11:   break;
12: } while (true);
13: System.out.println(count);
```

- A. 2
- B. 3
- C. The code does not compile.
- D. This is an infinite loop

14. Which of the following best describes the flow of execution in this for loop if beta always returns false?

```
for (alpha; beta; gamma)
{
    delta;
}
```

- A. alpha
- B. alpha, beta
- C. alpha, beta, gamma
- D. None of the above

15. Which of the following best describes the flow of execution in this for loop if the loop body is run exactly once?

```
for (alpha; beta; gamma)
{
    delta;
}
```

- A. alpha, delta, gamma, beta
- B. alpha, beta, delta, gamma, beta
- C. alpha, delta, gamma, alpha, beta
- D. alpha, beta, delta, gamma, alpha, beta

16. What is the output of the following?

```
public class Shoelaces
{
    public static void main(String[] args) {
        String tie = null;
        while (tie == null);
        tie = "shoelace";
        System.out.print(tie);
    }
}
```

- A. null
- B. shoelace
- C. shoelaceshoelace
- D. None of the above

17. What is the output of the following application?

```
package stocks;
public class Bond {
    private static int price = 5;
    public boolean sell() {
        if(price<10)
        { price++; return true;
        }
        else if(price>=10) {
            return false;
        }
    }
    public static void main(String[] cash) {
        new Bond().sell();
        new Bond().sell();
        new Bond().sell();
        System.out.print(price);
    }
}
```

- A. 5
- B. 6
- C. 8
- D. The code does not compile.