1. Choose the correct option based on this code segment:

```
"abracadabra".chars().distinct().peek(ch -> System.out.printf("%c ",
ch)). sorted();
```

A. It prints: “a b c d r”
B. It prints: “a b r c d”
C. It crashes by throwing a java.util.IllegalFormatConversionException
D. This program terminates normally without printing any output in the console

2. Choose the correct option based on this program:

```
class Consonants {

private static boolean removeVowels(int c) {
      switch(c) {
            case 'a':
            case 'e':
            case 'i':
            case 'o':
            case 'u':
                  return true;
      }
      return false;
}
      public static void main(String []args) {
            "avada kedavra".chars()
            .filter(Consonants::removeVowels)
            .forEach(ch -> System.out.printf("%c", ch));
      }
}
```

A. This program results in a compiler error
B. This program prints: "aaaeaa"
C. This program prints: "vd kdvr"
D. This program prints: " avada kedavra "
E. This program crashes by throwing a java.util.IllegalFormatConversionException

3. Choose the best option based on this program:

```
public class AllMatch{

    public static void main(String []args) {
       boolean result = Stream.
           of("do", "re", "mi", "fa", "so", "la", "ti")
           .filter(str -> str.length() > 5)  // #1
          .peek(System.out::println)  // #2
          .allMatch(str -> str.length() > 5);  // #3
          System.out.println(result);
    }
}
```

A. This program results in a compiler error in line marked with comment #1
B. This program results in a compiler error in line marked with comment #2
C. This program results in a compiler error in line marked with comment #3
D. This program prints: false
E. This program prints the strings “do”, “re”, “mi”, “fa”, “so”, “la”, “ti”, and “false” in separate lines
F. This program prints: true

4. Choose the best option based on this program:

```
import java.util.regex.Pattern;
import java.util.stream.Stream;

public class SumUse {
    public static void main(String[] args) {
        Stream<String> words = Pattern.compile(" ").splitAsStream("a bb
ccc");
        System.out.println(words.map(word -> word.length()).sum());
    }
}
```

A. Compiler error: Cannot find symbol “sum” in interface Stream<Integer>
B. This program prints: 3
C. This program prints: 5

D. This program prints: 6
E. This program crashes by throwing java.lang.IllegalStateException

5. Determine the behaviour of this program:

```
class LambdaFunctionTest {
   @FunctionalInterface
   interface LambdaFunction {
       int apply(int j);

       boolean equals(java.lang.Object arg0);
   }

   public static void main(String[] args) {
       LambdaFunction lambdaFunction = i -> i * i;
// #1 System.out.println(lambdaFunction.apply(10));
}
}
```

A. This program results in a compiler error: interfaces cannot be defined inside classes
B. This program results in a compiler error: @FunctionalInterface used for LambdaFunction that defines two abstract methods
C. This program results in a compiler error in code marked with #1: syntax error
D. This program compiles without errors, and when run, it prints 100 in console

6. Choose the best option based on this program:

```
import java.util.*;
class Sort {
   public static void main(String[] args) {
       List<String> strings = Arrays.asList("eeny ", "meeny ", "miny ", "mo ");
       Collections.sort(strings, (str1, str2) -> str2.compareTo(str1));
       strings.forEach(string -> System.out.print(string));
   }
}
```

A. Compiler error: improper lambda function definition
B. This program prints: eeny meeny miny mo
C. This program prints: mo miny meeny eeny

D. This program will compile fine, and when run, will crash by throwing a runtime exception.

7. What will be the result of executing this code segment ?

```
 Stream.of("ace ", "jack ", "queen ", "king ", "joker ").mapToInt(card
-> card.length()) .filter(len -> len > 3) .peek(System.out::print)
.limit(2);
```

A. This code segment prints: jack queen king joker
B. This code segment prints: jack queen
C. This code segment prints: king joker
D. This code segment does not print anything on the console

8. Choose the correct option based on the following code segment:

```
Comparator<String> comparer = (country1, country2) ->
country2.compareTo(country2); // COMPARE_TO

String[ ] brics = {"Brazil", "Russia", "India", "China"};
Arrays.sort(brics, null);
Arrays.stream(brics).forEach(country -> System.out.print(country + "
"));
```

A. The program results in a compiler error in the line marked with the comment COMPARE_TO
B. The program prints the following: Brazil Russia India China
C. The program prints the following: Brazil China India Russia
D. The program prints the following: Russia India China Brazil
E. The program throws the exception InvalidComparatorException

9. Choose the correct option based on this program:

```
import java.util.stream.Stream;
public class Reduce {
   public static void main(String []args) {
     Stream<String> words = Stream.of("one", "two", "three");
    int len = words.mapToInt(String::length)
        .reduce(0, (len1, len2) -> len1 + len2);
    System.out.println(len);
    }
}
```

A. This program does not compile and results in compiler error(s)
B. This program prints: onetwothree
C. This program prints: 11
D. This program throws an IllegalArgumentException

10. Choose the correct option based on this code segment :

```
List<Integer> ints = Arrays.asList(1, 2, 3, 4, 5);
ints.replaceAll(i -> i * i); // LINE
System.out.println(ints);
```