

- Assuming you have the below code snippet, write what is missing inside the switch / case statement.

```
Scanner in = new Scanner(System.in);
System.out.println("Enter a day of the week: ");
String input = in.nextLine();
switch(input) {
case "Monday":
System.out.println("First day of the week");
break;
case "Tuesday":
System.out.println("Second day of the week");
break;
case "Wednesday":
System.out.println("Third day of the week");
break;
case "Thursday":
System.out.println("Fourth day of the week");
break;
case "Friday":
System.out.println("Fifth day of the week");
break;
// Missing code starts here
}
```

- Assuming you have the below code snippet, write an if/else statement that tells you if a number is divisible by 10:

```
Scanner in = new Scanner(System.in);
System.out.println("Enter a number: ");
int x = in.nextInt();
```

- Write a while loop that prints "Hi" 3 times
- You are given an incomplete set of instructions. What the instructions are supposed to do is to print 100 stars. What is the piece missing in the middle of the first line?

```
for (int i=0; ____; i=i+1) {
System.out.println("*");
}
```

- You are given the following instructions. What is the value of counter after executing the above lines of code on n of type integer and value 16?

```
int counter = 0;
int n = 16;
while (n is > 0) {
counter = counter + 1;
n = n / 3;
}
```

- You are given an incomplete set of code. What the code is supposed to do is to decide whether the number given by the user (earlier in the code not provided to you here) is larger than or equal to 10, between 7 (included) and 10 (not included), or less than 7. If the number is larger than or equal to 10, then print "You won first prize!", if the number is between 7 and 10, print "You won second prize!", and otherwise print "You lost!".

```
if (x >= 10) {
    System.out.println("You won first prize!");
    _____ (x >= 7 && x < 10) {
        System.out.println("You won second prize!");
    } _____ {
        System.out.println("You lost!");
    }
}
```

- Consider the following code and what is printed when the above code is executed?

```
String str = "abc";
if (str.length() > 2) {
    System.out.println("You won!");
}
System.out.println("You lost!");
```

- Is the following a boolean expression? The sky is blue and the earth is round
- Is the following a boolean expression? Get an A in the class
- Write the java code needed to do the following:
  - Declare an integer variable named speed and initialize its value to 30;
  - Declare a Boolean variable named condition;
  - Declare a double variable named difference and initialize its value to 2.4;
  - Declare a String variable named unit and initialize its value to "mph".
- 1. What is an algorithm? Select ALL statements that apply to any algorithm.
  - A An instruction in Java.
  - B A set of instructions that terminate.
  - C A set of unambiguous instructions.
  - D A computer program.
  - E A series of lines of code.
- You want to allocate memory to store the age of the user. Which one of the following instructions would best fit this need?
  - A char age;
  - B age = int;
  - C String age;
  - D int age;
  - E age = String;
- For each of the following pseudocode logical expressions, write the corresponding expression in Java.

1. Define a listener, retrieve an integer from the user, and store the value as `current_speed`
2. If `current_speed` is greater than `maximum_speed`, then print "attention: decrease your speed".
3. Calculate the difference of `current_speed` minus maximum speed.