CMP-167 Fall 2019

Midterm Exam Version 1

Name_____

Date_____

Question 1: Show the output from the following code segments:

	Code	Output
A (4)	<pre>for (int i = 15 ; i > 5; i -= 3) { if (i % 2 == 0) { System.out.println("sun " + i); } else { System.out.println("moon " + i); } }</pre>	
B (4)	<pre>for (int i = 6 ; i < 10 ; i++) { System.out.print("i = " + i + " : "); for (int j = i ; j > 5 ; j) { System.out.print((j + i) + " "); } System.out.println(); }</pre>	
C (5)	<pre>public static void pick(int num) { switch (num) { case 10: System.out.println("Almond Joy"); case 20: System.out.println("Candy Corn"); break; case 30: System.out.println("Pretzels"); case 40: System.out.println("Superman"); break; default: System.out.println("Joker"); break; } }</pre>	method callresultpick(10)

Question 1: Show the output from the following code segments:

```
public class V1 {
        public static void main(String[] args) {
           foo(false);
           System.out.print("All done!");
        }
        public static void foo(boolean a) {
           boolean b = true;
           bar(a, b);
           boolean d = false;
           soo(d, "dog");
        }
        public static void bar(boolean a, boolean b) {
           if (a || b) {
           System.out.println("trick");
D
           } else if (a) {
           System.out.println("treat");
(12)
           } else if (b) {
           System.out.println("knock");
           } else {
           System.out.println("run");
           }
           boolean c = !a;
           soo(c, "cat");
        }
        public static void soo(boolean e, String s) {
           if (e) {
           System.out.println(s + " is " + e);
           } else {
           System.out.println(s + " is " + e);
           }
        }
     }
```

Question 2: Valid or Invalid Syntax?

```
А
    int numBooks = 3;
    int numNotebooks = 2;
    numBooks ++ numNotebooks;
(1)
В
    int candies = 5;
    System.out.print("Candy count = " + candies);
(1)
В
    int lveryTall = 7;
(1)
D
    String s1 = "Trick";
    String s2 = "Treat";
    char c = s1.chairAt(3);
(1)
    int a = 15;
Е
    if ((a >= 10) || (a <= 20))
          a = a * 7;
    else
(1)
          a = a * 3;
```

Question 3 (24): During text messaging, people use abbreviations to save on typing. Write the code to ask the user for an SMS Abbreviation and perform the translation for the following 3 abbreviations (creating a method is not required):

- GMAB means Give Me A Break
- TOT means Trick Or Treat
- SSM means Study Some More

If the abbreviation is not included in the list, your program should output

"Unknown Abbreviation"

for the translation.

The input should be case insensitive and the output should be as shown above.

Example Run:

}

}

```
Please enter an abbreviation:
GMAB
GMAB means Give Me A Break
```

import java.util.Scanner;

```
public class V1 {
```

```
public static void main(String[] args) {
```

Question 4 (24): Write a **public static void** method named **halloween** that takes in an **int candies** as an argument **and prints** a phrase based on the rules below:

candies is greater than 0 but Less than 5:print "Eacandies is 30 or more but less than 70:print "Sicandies is 5 or greater but less than 30:print "Ticandies is 70 or over:print "Micandies is 0 or less:print "Ti

print "Eat Some More" print "Stomach Ache" print "That's a Lot" print "Must Share" print "Trick or Treat Time" **Question 5 (15):** Write a block of code that will do the following:

In the range of numbers from 5 to 50 inclusive

When a number is even your code should output "**N** is Sour Patch" When a number is odd your code should output "**N** is Licorice" When a number is divisible by 3 print out "**N** is divisible by 3" **Question 6 (27):** Write a complete class named **Warlock** with **2 static void methods** and a **static void main method** as shown below:

- i. A method named **mystery** with zero arguments that will print "I am the mystery method!!!"
- ii. A method named **goblin** with 2 **int** arguments **a** and **b**. Use **a** to determine how many times to call the **mystery**. After all invocations of **mystery** are complete, print the product of **a** * **b**.
- iii. Show the method invocation of **goblin** from the **main** method.