CSCI-101 Programming I
Exam 1

Instructions

Please follow the rules below as you work through this exam.

- Please leave all notebooks and electronics (including cell phones and smart watches) at the side of the room.
- This is a closed book/closed notes exam.
- Do not spend too much time on any one problem. You have 50 minutes to complete this exam.
- Partial credit is awarded.
- Please write legibly. If I cannot read your answers, I cannot give you credit.
- Please write your answers in the order specified. If you need additional paper, please raise your hand to ask your instructor for additional paper.
- Your code must be written to behave as specified.
- You must properly use all identifiers that are explicitly stated.
- Please use proper and consistent coding conventions (indentation, naming identifiers, etc.).
- Please stay in your seat until you are ready to hand in your exam. You may leave when you are finished.
- Once you leave the testing room you cannot return until the exam is over. If you need to use the restroom, please use it now.

Assume the code you are writing for this exam is placed in a file named **Exam1.java**.

1. Write a *complete program* (including a class definition and main method) that will run when compiled and that satisfies the program requirements shown below.

2. Write a statement that creates a **Scanner** that can be used to read data from the keyboard.

3. Ask the user to enter their name. Read the value from the keyboard and store the value in a variable named **name**.

4. Print to the screen "**Name:** " followed by the the value of the variable named **name**.

5. Print to the screen "**Is Joe**" if the string named **name** holds the string "**Joe**"; otherwise print "**Not Joe**".

6. Ask the user to enter in their middle initial. Read the value from the keyboard and store the value in a variable of type **char** named **initial**.

7. Print to the screen "**Initial:** " followed by the value of the variable named **initial**.

8. Print to the screen "**Is X**" if the value in the char named **initial** is the letter **X**; otherwise print "**Not X**".

9. Print to the screen "**Is X or Y**" if the value in the char named **initial** is the letter **X** or the letter **Y**; otherwise print "**Neither X or Y**".

10. Ask the user to enter in their age. Read the value from the keyboard and store the value in a variable named **age**.

11. Print to the screen "**Age:** " followed by the value of the variable named **age**.

12. Print to the screen "**Is 19**" if the value in the variable named **age** is **19**; otherwise print "**Not 19**".

13. Print to the screen "**between 19 and 21**" if the value in the variable named **age** is between the values **19** and **21** (inclusively); otherwise "**Not between 19 and 21**".

14. Use a <u>while-loop</u> to print to the screen the integer between **20** and **50** (inclusively).

15. Use a <u>while-loop</u> to compute the sum of the integers between **20** and **50** (inclusively) After the sum has been computed, print to the screen "**Sum:** " followed by the sum.

16. Use a <u>while-loop</u> to print to the screen the odd integers between **20** and **50** (inclusively).