**CS 170 - Lab 10**

**Branching & Decisions – Switch Statement & Conditional Operator**

**Introduction**

The purpose of this lab is to introduce you to the **Switch** statement.

**Note:** Enter your answers in the correct position, in this **blue color.**

1. What is the value of **alpha** for each input after the following Java code executes? (Assume that alpha is an **int** variable.)

|  |  |
| --- | --- |
| **switch (alpha)**  **{**  **case 1:**  **case 2:**  **alpha += 2;**  **break;**  **case 4:**  **alpha++;**  **case 5:**  **alpha \*= 2;**  **case 6:**  **alpha += 5;**  **break;**  **default:**  **--alpha;**  **}** | **Answers:**   * If alpha = 1 final Value = \_\_\_\_\_\_\_3\_\_\_\_\_\_\_\_ * If alpha = 5 final Value = \_\_\_\_\_\_\_15\_\_\_\_\_\_\_\_ * If alpha = 7 final Value = \_\_\_\_\_\_\_6\_\_\_\_\_\_\_\_ |

2. What is the value of **beta** for each input after the following Java code executes? (Assume that beta is an **int** variable**.**)

|  |  |
| --- | --- |
| **if (beta > 0)**  **{**  **switch (beta)**  **{**  **case 1:**  **beta += 3;**  **case 3:**  **++beta;**  **break;**  **case 6:**  **beta += 6;**  **case 8:**  **beta %= 3;**  **break;**  **default:**  **--beta;**  **}**  **}**  **else**  **beta += 2;** | **Answers:**   * If beta = 1 final Value = \_\_\_\_\_\_5\_\_\_\_\_\_\_\_\_ * If beta = 6 final Value = \_\_\_\_\_\_0\_\_\_\_\_\_\_\_\_ * If beta = 0 final Value = \_\_\_\_\_ 2\_\_\_\_\_\_\_\_\_\_ |

**3.** What is the value of **gamma** for each input after the following Java code executes? (Assume that gamma is an int variable**.**)

|  |  |
| --- | --- |
| **if (gamma > 2)**  **gamma = (gamma % 2 == 0)? 10 : 20;**  **else**  **gamma = (gamma % 2 == 1) ? 15: 25;** | **Answers:**   * If gamma = 1 final Value = \_\_\_\_\_15\_\_\_\_\_\_ * If gamma = 2 final Value = \_\_\_\_\_25\_\_\_\_\_ * If gamma = 3 final Value = \_\_\_\_\_20\_\_\_\_\_\_ |