Zain Ahmed Sohail – 374527 Andi Heynoum Dala Rifat – 374674 Ali Ariff – 374675

1) The difference in the way HelloWorldConsole retrieves user input from HelloWorldGraphical is that in HelloWorldConsole there is no event listener or blocking call for user input while HelloWorldGraphical has an Event Listener waits for a user input.

2)

- a) The minimum number of event listeners required for HelloWorldGraphical is 1 as we can just create one event listener and add ids to the buttons. The event listener can differentiate these buttons using the id.
- b) The maximum number of event listeners required for HelloWorldGraphical is 4. Each button having an event listener waiting for user input.
- c) The difference between the two is that using one event listener has better performance than having too many. This is because running too many even listeners take a lot of time. This might be experienced much with few buttons however, this becomes a lot more significant when using too many buttons. If the functions are same, it's better to use less event listeners as it would be easier to maintain. But if the functions are different within the buttons, it is better to use more event listeners.