# ICE 8 – Arrays (Ice Cream Shop)

## Part 2 – Initial Screen

Text

Description automatically generated

Context: As the application (Ice Cream Shop) opens, it greets the user with a brief introduction as well as prints a visual menu of the current ice cream flavours that are available with their name and pricing. Finally, it prompts the user to enter the exit sequence as well.

## Questions

**Question 1. All elements of a Java array must be of the same data type (e.g. String). True or False?**

This statement is true, as within Java an array is a fixed data structure. Meaning that the size and data type cannot be changed, so it is important to note that when an array is created all elements of the array are of the same data type (i.e. all strings). So, within Java, arrays must be all of the same element.

**Question 2. You can add and remove elements from an array in Java. Is the above statement true or false?**

This statement is true though it should be noted that there notable restrictions, at least within Java. When an array is created, the size of the array cannot be changed, though the individual elements within the array can be manipulated and modified.

**Question 3. Show a 1-line code example declaring an array named fruits with the following elements:**

**Apple, banana, strawberry, blueberry**

String[] fruits = {"Apple", "banana", "strawberry", "blueberry"};

*Index values 0 1 2 3*

**Question 4. Show a 1-line code example printing the element banana from the array in question 2?**

System.out.println(fruits[1]);

**Question 5. Show a 1-line code example changing the element banana to acai in the array in question 2?**

fruits[1] = “acai”;

This will change the value of the indexed item at “1” from banana to acai. It can be proven with a print line statement targeting index [1].