**COMP 3315 Pre-Lab3: MIPS Branches and Loops**

**Number and Name:**

1. **Object**: MIPS Branch and Loop examples using arrays
2. **Procedure**:
   1. Write and run a MIPS algorithms that has 9 element array of integers at data segment and the code finds the multiplication of elements of the array using a loop and prints it.

**Example**: array: .word 3, 7, 4, 5, 6, 8, 2, 9, 1 (9 elements)

Output: 362880

Write the C code (Or Pseudo code If you don’t know C language) first and then convert it to MIPS code and the output with short comments in the box below. Submit your C code below and mips code in .asm file.

#include <stdio.h>

int main() {

int array[] = {3, 7, 4, 5, 6, 8, 2, 9, 1 };

int result = 1;

for (int i = 0; i < 9; i++) {

result \*= array[i];

}

printf("The multiplication: %d\n", result);

return 0;

}