1. Translate the following algorithm in to Swift code:

* Step 1: Declare a **double** variable named **miles** with initial value **100.**
* Step 2: Declare a **double** constant named **Mile\_to\_Kilometre** with initial value **1.609**
* Step 3: Declare a **double** variable named **kilometre**, multiply miles and **Mile\_to\_Kilometre**, and assign the result to **kilometre**
* Step 4: Display **kilometre** to the console.

What is kilometre after Step 4?

1. Assume **int a = 1** and **double d=0,**  and that each line is independent. What are the results
   1. a = 46/9
   2. a = 46 % 9 + 4 \* 4 -2
   3. a = 45 + 43 % 5 \* (23\*3%2)
   4. a %= 3 / a+ 3
   5. d = 4 + d \* d + 4
   6. d +=1.5 \* 3 (++a)
   7. d -= 1.5 \* 3 + a++

1. Show the output of the following statements (write a program to verify your results):

print (“1” + 1);

print (‘1’+ 1);

print (“1” + 1 + 1);

print (“1” + (1 + 1));

print (‘1’ + 1 + 1);

1. How do you convert to or from an integer?
2. Go back to the Day we began Loops in Java.
   1. Rewrite the programs TestBreak and TestContinue (given) for Swift.
   2. Rewrite the programs without using break and continue in Swift.

1. Write a program that prompts the user to enter the number of students and each student’s name and score, and finally displays the student with the highest score.

1. Write a program that displays all the leap years, ten per line, in the twenty-first century (from 2001 to 2100).