Write a program that simulates a lottery game machine.

The program will generate an array of 5 integers named *WinningDigits*, with a randomly generated number in the range of 0 through 9 for each element in the array, no duplicates. Write a FUNCTION named *LotteryNumbers* which will accept the array *WinningDigits* as a parameter and fill it with 5 unique digits.

The program then asks the user to enter 5 different digits, in numerical from small to large, and then stores them in a second array named *Player*. Validate the input using a separate FUNCTION named *ValidateData* – no duplicates, between 0 & 9, in numerical order. Validate the input AFTER all 5 numbers have been entered by sending the array to the function and return a Boolean variable. If the values are not validated, require the user to retype all 5 numbers in *main* and validate again.

The program then compares the digits in the 2 arrays and counts how many digits match. (The values do not have to be in the same relative position.) Write a FUNCTION named *MatchData* to do this. Send both arrays as parameters. The function must produce the output: the winning digits, the player’s digits, the number of digits that match and lists the matching digits, as shown below.

The program should loop, asking if the user wants to play again, until the user enters N or n. If user enters Y or y, the entire process repeats. (Validate the input.)

Example:

```
WinningDigits
  7  9  0  2  3

Player
  2  4  5  7  9
```

Output:

Winning Digits:  7   9   0   2   3
Your Digits:     2   4   5   7   9

You matched 3 digits: 2, 7, 9

Questions to consider:
1. How do you generate random digits between 0 & 9 only?
2. How do you guarantee no duplicates when generating random numbers?
3. How do you guarantee no duplicates when validating the player’s input?
4. How do you compare the 2 arrays?
5. How do you do everything EFFICIENTLY?