

Problem Set 09 - Ruby Part V

Write the following Ruby programs in separate files such that the name of each file is in the format

`main9n.rb`

where *n* is the number of the program in the list below. Each program must use blocks.

Programs:

1. Write a program that defines a function that takes a parameter. If the parameter is a hash object, it displays each element as key-value pairs enclosed in parentheses on separate lines. Otherwise, if the parameter is an array object, it displays each element enclosed in curly braces on separate lines. Otherwise, it displays the string "Processing...".
Afterward, invoke the function with an array object, a hash object, and an integer object.
2. Write a program that defines an array function that takes an integer array parameter and an integer parameter. If the integer parameter is positive, it returns an array of all the elements of the array parameter that are multiples of the integer parameter; otherwise, it returns an empty array.
Afterward, create an array of integers 1 through 100, inclusively, prompt the user to enter an integer, and display the invocation of the function with the array and input as its arguments.
3. Write a program that defines a Boolean function that takes an integer array parameter and an integer parameter. If more elements of the array parameter are less than the integer parameter, it returns true; otherwise, it returns false.
Afterward, create an array of 50 random integers between 1 and 1000, inclusively, continually prompt the user to enter an integer until an invocation of the function with the array and input evaluates to true.
4. Write a program that defines an integer function that takes a string array parameter and a string parameter. and returns the number of elements of the array parameter that are case-insensitive anagrams of the string parameter.
Afterward, initialize an array with 20 five-letter words, prompt the user to enter a word, and then display the invocation of the function with the array and input as its arguments.