Exercise 2-28

- (10 pts) Add comments to the MIPS code above. This code processes two arrays and produces an important value in register $v0. Assume that each array consists of 2500 words indexed 0 through 2499, that the base addresses of the arrays are stored in $a0 and $a1 respectively, and their sizes (2500) are stored in $a2 and $a3, respectively. In your comments, call the arrays Array1 and Array2.

- (10 pts) In one sentence, what does this code compute and store in $v0? Be very specific (make sure that your answer doesn’t have more than one interpretation of what it means).
(5 pts) Exercise 2-31

• Suppose you are given the code for the following function:
  
  int function1(int a, int b);

  Write MIPS code to call function1(3, 7) and then store the result in $s0

(5 pts) Exercise 2-32

• Now you have this definition for function1:
  
  int function1(int a, int b) {
    return (a – b);
  }

  Write MIPS code to define function1.
(10 pts) Exercise 2-33

- Write MIPS code to define the following function:
  
  ```
  int cat(int a, int b) {
    if (a < b)
      return a;
    else
      return b;
  }
  ```
(5 pts) Exercise 2-36

- Write the MIPS code to define the following function
  ```
  int function2(int g, int h)
  {
    return g + function1(g, h);
  }
  ```
  (You will need to store something on the stack – why?)
(5 pts) Exercise 2-37

- Write the MIPS code to define the following function
  
  ```
  int function3(int a, int b)
  {
    return function6(a) + function7(b); 
  }
  ```
  
  (You will need to store something on the stack – why?)
(15 pts) Exercise 2-38

- Write the MIPS code to define the following function
  ```
  int lemur(int a, int b)
  { return panda(a) + b; }
  ```
• Write the MIPS code to define the following function
  int alpaca(int x, int y, int z)
  { int temp = ferret(y, z);
    return hedgehog(temp + x);
  }