_____,   _____
Last Name   **First Name and Initial**

Question about arrays in MIPS:

Consider the following MIPS code fragment:

```
        .data
# stored in A are squares of first 7 primes, zero at end
A:      .word  4, 9, 25, 49, 121, 169, 289, 0
        .text
# insert MIPS instructions here.
```

For insertion at the comment, write a *single* MIPS program that will do all of the following (not item-by-item, but all at once):

1. Put the starting address of **A** into register **$s1**.

2. Inside a loop, access each element of **A** and add these values, leaving the result in register **$s2**. [You must use a loop for this.]

3. Print the resulting sum, using **syscall**. [Recall that **syscall** requires **$v0** equal to 1 to print the value in **$a0**.]

   Your MIPS code should do what is asked for above and *nothing more*.