

Please use pencil and erase mistakes. If you need more room, use the back. Do not include comments. Write a complete MIPS program prompts the user for two integers (in a subroutine – call it twice), calculates the product of the integers (also in a subroutine) and prints the product with simple descriptive text (also in a subroutine). You will have three little subroutines. Use the "simple linkage convention" discussed in class (no stack use, use appropriate registers for arguments and return values). Do not worry about branch delays. Some syscall codes you may need are: print string, code 4 in \$v0, string address in \$a0; read integer, code 5, value returned in \$v0; print integer, code 1, value in \$a0; end program, code 10. 10 points

```

.data
prompt: .asciiz "Please enter an integer value: "
endMsg: .asciiz "Product: "

.text
.globl main

```

main:

```

la    $a0, prompt
jal   getInt
move  $s0, $v0

```

```

la    $a0, prompt
jal   getInt
move  $a1, $v0

```

```

move  $a0, $s0
jal   product

```

```

move  ($a1), $v0

```

```

la    $a0, endMsg
jal   print

```

```

li    $v0, 10
syscall

```

arg goes into \$a0!

2 args?

ok. I guess

getInt:

li \$v0, 4  
syscall

li \$v0, 5  
syscall

jr \$ra

product:

multu \$a0, \$a1

mflo \$v0

jr \$ra

print:

li \$v0, 4  
syscall

li \$v0, 1  
move \$a0, \$a1  
syscall

jr \$ra