

```

#Programme developed in lecture 20th October as demo of PCSPIM
#
.data          #declares data e.g. text strings, numbers etc
ask:           .asciiz "\ngive me a number,n "
reply:        .asciiz "n+5= "
stopping:     .asciiz "user generated programme end"
              #
              .text          #back to program instructions
              .globl main
main:          #label for start of program
              #
              li $v0,4        #select to o/p text
              # ( li = load immediate value into register)
              la $a0,ask      #a0 points to start address of text string
              # ( la = load address value into register )
              syscall         #asking user for a number
              #
              li $v0,5        #select to i/p number
              syscall         #read a number from user
              #
              beq $v0,$zero,stops #test for entered value 0 --> stops program
              #
              addi $t0,$v0,5   #some trial arithmetic e.g add 5
              #
              li $v0,4        #select to o/p text
              la $a0,reply    #a0 point to string
              syscall         #print out reply
              #
              move $a0,$t0     #copy resultant arithmetic value to a0
              li $v0,1        #select to o/p a number
              syscall         #output numeric result to user
              #
              j main          #loop through program again
              #
stops: li $v0,4              #select to o/p text
      la $a0,stopping       #ao point to string
      syscall               #inform user programm stopping
      #
      li $v0,10             #select to exit to system
      syscall               #exits

```

Running program in PCSPIM:

### Console

```
give me a number,n 3  
n+5= 8  
give me a number,n 4  
n+5= 9  
give me a number,n 8  
n+5= 13  
give me a number,n 0  
user generated programme end
```