FUNCTION testfun, a, b, SWCH=s
Print,'Number of parameters=', n_params()
CASE arg_present(a) OF
  0: Print,'a not present or passed by value'
  1: Print,'a present and passed by reference'
ENDCASE
CASE arg_present(b) OF
  0: Print,'b not present or passed by value'
  1: Print,'b present and passed by reference'
ENDCASE
IF KEYWORD_SET(s) THEN BEGIN
  b=a*b
  print,'Internal value of b=', b
  Return, a*b ;value to be returned if s EQ 0
ENDIF ELSE BEGIN
  b=a+b
  print,'Internal value of b=', b
  Return, a+b ;value to be returned if s NE 0
ENDELSE
END

;Part B
IDL> a=3 & b=4 & print,testfun(a,b)
;Number of parameters=           2
;a present and passed by reference
;b present and passed by reference
;Internal value of b=           7
;     10
;IDL> print,a
;       3
;IDL> print,b
;       7

;Part C
IDL> a=3 & b=4 & print,testfun(a,4,/swch)
;Number of parameters=           2
;a present and passed by reference
;b not present or passed by value
;Internal value of b=          12
;     36
;IDL> print,a
;       3
;IDL> print,b
;       4