

Ibn Khaldoun University, Tiaret (Algeria)
Faculty of Material Sciences
Department of Physics
1st year Licence
Module: Computer Science I

Second-semester exam (correction)

Exercise 1 (5 points, -1 sur chaque erreur syntaxique)

program exo1	
real::a(3,3),d	1 pts
integer::i,j	
write(*,*) "reading the matrix"	1.5 pts
do j=1,3	
write(*,*) "input colomn",j	
do i=1,3	
read(*,*) a(i,j)	
end do	
end do	
d= a(1,1)*a(2,2)*a(3,3)-a(1,1)*a(2,3)*a(3,2)- a(1,2)*a(2,1)*a(3,3)+a(1,2)*a(2,3)*a(3,1)+a(1,3)*a(2,1)*a(3,2)- a(1,3)*a(2,2)*a(3,1)	1.5 pts
write(*,*) "d=",d	1 pts
end program exo1	

Exercise 2 (5 points, -1 sur chaque erreur syntaxique)

program exo2	
integer:i	1 pts
do i=1,200	2 pts
write(*,*) i**2	2 pts
end do	
end program exo2	

Exercise 3 (5 points, -1 sur chaque erreur syntaxique)

program exo3	
real::x,y	1 pts
write(*,*) "input x"	
read(*,*) x	
if(abs(x)<2*3.14) then	3 pts
y=exp(x*x)/(2*3.14)	
Else	
y=0	
end if	
write(*,*) "y=",y	1 pts
end program exo3	

Exercise 4 (5 points, -1 sur chaque erreur syntaxique)

program exo4	
real::a(4,4),d	
integer::i,j	
write(*,*) "reading the matrix"	
do j=1,4	
write(*,*) "input colomn",j	
do i=1,4	
read(*,*) a(i,j)	2 pts
end do	
end do	
d=a(1,1)+a(2,2)+a(3,3)+a(4,4)	
write(*,*) "d=",d	2 pts
write(*,*) "displaying the matrix"	
do i = 1, 4	
write(*,*) (a(i,j),j=1,4)	1 pts
end do	
end program exo4	