

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

Correction of first Semester Make-up Exam

Exercise 1 (2 points)

algorithm exo1

```
real : c,f
begin
read(f)
c=5/9*(f-32)
write(c)
end
```

Exercise 2 (6 points)

	A	B	C
A ← 1	1		
B ← 6		6	
C ← A*B+2			8
A ← A+C	9		
B ← A-C		1	
C ← C+2	9	1	10

	A	B	C
A ← 2	2		
B ← 6		6	
C ← 51			51
C ← C-10			41
B ← 2*A-C		-37	
C ← C+2	2	-37	43

	A	B	C
B ← 6		6	
C ← 10			10
A ← B+C-1	15		
B ← A-C		5	
C ← C-1	15	5	9

Exercise 3 (6 points)

1- a) $(10)_{16} = (16)_{10}$ b) $(2F16)_{16} = (12054)_{10}$ c) $(1A2D16)_{16} = (1715478)_{10}$
2-a) $(10)_{10} = (A)_{16}$ b) $(1710)_{10} = (6AE)_{16}$ c) $(374010)_{10} = (5B4FA)_{16}$

Exercise 4 (6 points)

```
algorithm exo4
v,r,h:real
begin
read(r)
```

```
read(h)
v ← 3.14*r*r*h
write(v)
end
```