Institute of Technology of Cambodia

Department of Information and Communication Engineering (GIC)

Assignment
TD3

Lecturer	:	Bou Channa
Subject	:	Algorithms and Programming (TD)

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2020~2021

① write the algorithm to check whether a number is even or odd

```
Var   num : integer
Begin
        write("Input the number : ")
        read(num)
        If(num MOD 2 ==0) then
            write("The number is even.")
        else
            write("The number is odd.")
        end if
end
```

② write an algorithm to check number is positive or negative

```
Var   num : integer
Begin
        write("Input the number : ")
        read(num)
        If(num >0) then
            write("the number is positive")
        else if (num==0) then
            write("the number is zero")
        else
            write("the number is negative.")
        end if
end
```

③ write algorithm to Find root of quadratic equation

```
Var a,b,c : integer
    d, x1, x2 : Float

Begin
    write("Input the value of a,b,c ")
    read(a)
    read(b)
    read(c)
    d ← pow(b,2) - 4*a*c

    If (d>0) then
        x1 = (-b + sqrt(d))/2a
        x2 = (-b - sqrt(d))/2a
        write("the root of equation is x1=", x1,
              " and x2=", x2)

    else If (d==0) then
        x1 = -b/2a
        write("the root of equation is
              x1=x2=", x1)

    else
        write("There are no root")
    end if

end
```

④ write the algorithm to Find max number among 8 numbers

```
Var n1,n2,n3,n4,n5,n6,n7,n8, max : integer
Begin
    write("Input the 8 numbers ")
    read(n1)
    read(n2)
    read(n3)
    read(n4)
    read(n5)
    read(n6)
    read(n7)
    read(n8)
    max ← n1
    If (max<n2) then
        max ← n2
    end if
    If (max<n3) then
        max ← n3
    end If
    If (max<n4) then
        max ← n4
    end If
    If (max<n5) then
        max ← n5
    end If
    If (max<n6) then
        max ← n6
    end If
```

```
    If (max < n7) then
        max ← n7
    end If
    If (max < n8) then
        max ← n8
    end If
    write("The max number among 8 numbers
                is: ", max)
end
```