

**P1. Check if a number is prime.**

```
var a : int
var b: int
read (a)
read (b)

var gcd : int = 0

if ( a*b == 0) then
    gcd = a+b
Else
    begin
        while (a != b) do
            if (a > b) then
                a = a - b
            else
                b = b - a
            end
        end
        gcd = a
    end

print("The gcd between %i and %i is %i", a, b, gcd)
```

**P2. Compute the solution of a second order equation**

```
var a,b,c : int
read(a,b,c)

var delta : int
delta = b*b - 4*a*c

if (delta < 0) then
    print("there is no real solution")
else
    if (delta == 0)
        print("the solution is %r", -b/2a)
    else
        begin
            var s1, s2 : real
            s1 = (-b + sqrt(delta) ) / (2*a)
            s2 = (-b - sqrt(delta) ) / (2*a)
            print("the solutions are %r and %r", s1, s2)
        end
    end
end
```

**P3. Compute the max of n numbers**

```
var arr : int[]
var k : int

var n : int
read(n)

for (k = 0; k < n; k = k + 1) do
    read(arr[k])

var max : int
max = arr[0]
```

```

for (k = 1; k < n; k = k + 1) do
    if (arr[k] > max) then
        max = arr[k]

print("The max is %l", max)

```

### **P1err. Check if a number is prime.**

```

var 1a : int
var b: int
read (a)
read (b)

var gcd : int = 0

if ( a*b == 0) then
    gcd = a+b
else
    begin
        while (a != b) do
            if (a > b) then
                a = a - b
            else
                b = b - a
            gcd = a
        end

print("The gcd between %i and %i is %i , a, b, gcd)

```