

## Lab 1a

### P1 – max of 3 numbers

```
{
    a: int;
    b: int;
    c: int;

    read (a);
    read (b);
    read (c);

    if (a > b && a > c)
    {
        write (a);
    }
    else if (b > c && b > a)
    {
        write (b);
    }
    else
    {
        write (c);
    }
}
```

## **P2– check if a number is prime**

```
{
    a: int;
    isPrime: int = 1;

    read (a);

    if (a <= 1)
    {
        write ("The number is not prime");
    }

    if (a != 2 && a % 2 == 0)
    {
        write ("The number is not prime");
    }
    else
    {
        nr: int = 3;
        while (nr < a)
        {
            if (a % nr == 0)
            {
                isPrime = 0;
                nr = a;
            }
            nr = nr + 2
        }
    }
    if (isPrime == 1)
    {
        write ("The number is prime");
    }
    else
    {
        write ("The number is not prime");
    }
}
```

### **P3 – compute sum of n numbers**

```
{
    n: int;
    read (n);

    arr: int [n];
    nrSum: int = 0;
    index: int = 0;

    for (index < n)
    {
        read (arr[index]);
        nrSum += arr [index];
        index = index + 1;
    }

    write ("The sum of the numbers is: " + nrSum);
}
```

## **P2err - check if a number is prime**

```
{
    ~a: int;
    isPrime: int = 1;

    read (a);

    if (a <= 1)
    {
        write ("The number is not prime");
    }

    if (a != 2 && a % 2 == 0)
    {
        write ("The number is not prime");
    }
    else
    {
        nr: int = 3;
        while (nr < a)
        {
            if (a % nr == 0)
            {
                isPrime = 0;
                nr = a;
            }
            nr = nr + 2
        }
    }
}

if (isPrime == 1)
{
    write ("The number is prime");
}
else
{
    write ("The number is not prime");
}
}
```