

## LAB EXERCISE – 2B

Convert the following programs to Java or C/C++ code. The red text is the information about the statements. After you finish copy/paste your codes in a word document and upload it to the system.

### 1) Fortran 95 Example program

! Input: An integer, List\_Len, where List\_Len is less  
! than 100, followed by List\_Len-Integer values  
! Output: The number of input values that are greater  
! than the average of all input values

information about the code

Implicit none

Integer Dimension(99) :: Int\_List

array definition, size 99, name Int\_list

Integer :: List\_Len, Counter, Sum, Average, Result

integer variable definition

Result = 0

Sum = 0

Read \*, List\_Len

input from keyboard

If ((List\_Len > 0) .AND. (List\_Len < 100)) Then

! Read input data into an array and compute its sum

Do Counter = 1, List\_Len

same as FOR loop

Read \*, Int\_List(Counter)

Sum = Sum + Int\_List(Counter)

End Do

end of loop

! Compute the average

Average = Sum / List\_Len

! Count the values that are greater than the average

Do Counter = 1, List\_Len

If (Int\_List(Counter) > Average) Then

Result = Result + 1

End If

End Do

! Print the result

Print \*, 'Number of values > Average is:', Result

output to monitor

Else

Print \*, 'Error - list length value is not legal'

End If

End

### 2) COBOL

IDENTIFICATION DIVISION.

PROGRAM-ID. IDEONE.

ENVIRONMENT DIVISION.

DATA DIVISION.

WORKING-STORAGE SECTION.

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variable definition, interger, name n

## PROCEDURE DIVISION.

```
ACCEPT n
PERFORM UNTIL n = 24
    DISPLAY n
    ACCEPT n
END-PERFORM.
STOP RUN.
```

input from keyboard  
same as WHILE loop  
output to monitor

## 3) ADA

```
with Ada.Text_IO; use Ada.Text_IO;
with Ada.Integer_Text_IO; use Ada.Integer_Text_IO;
```

```
procedure Test is
    subtype Small is Integer range 0..99;
    Input : Small;
begin
    loop
        Get(Input);
        if Input = 24 then
            exit;
        else
            Put (Input);
            New_Line;
        end if;
    end loop;
end;
```

infinite loop  
input from keyboard

output to monitor

## 4) PASCAL

```
program ideone;
var x: integer; s:integer;
begin
    x:=7;
    s:=0;
    repeat
        s:=s+x;
        x:=x-1;
    until x=0;
    writeln(s);
end.
```

output to monitor

## 5) C#

```
using System;
```

```
public class Test
{
```

```
public static void Main()
{
    int n;
    while ((n = int.Parse(Console.ReadLine()))!=42)
        Console.WriteLine(n);
}
```

input from keyboard  
output to monitor