**Name \_\_\_\_\_hunter nelson\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SPD assignment for week \_4\_\_**

SPD Programming problem number: \_\_1\_

***A Defining diagram***

**Input**

**Processing**

**Output**

Persons age in years and months

Prompt for age

Convert YearsToMonths

Add \*\*\* if over 500

Print age in months

Persons age in months

If over 500 then \*\*\* should appear

***B Solution algorithm***

ageInMonths

1. Prompt for age in years and months

2. DOWHILE AgeInMonths<9999

YearsToMonths=years\*12

YearsToMonths+months=AgeInMonths

IF AgeInMonths >500 THEN add\*\*\*

ENDDO

3. Print AgeInMonths

END

SPD Programming problem number: \_3\_\_

***A Defining diagram***

**Input**

**Processing**

**Output**

Student\_Records\*

\*consists of name , sex , age, material status.

Get student records

Zero out intended outputs

Count: Married\_Men

Single\_Men

Married\_Women

Single\_Women

Create Bachlors\_Report through IF/ENDIF statements

Print all outputs

Married\_Men

Single\_Men

Married\_Women

Single\_Women

Bachlors\_Report

***B Solution algorithm***

creeper\_program

1. Get student\_records

2. Set Married\_Men, Single\_Men, Married\_Women, Single\_Women, Bachlors\_Report to zero

3.

DOWHILE Student\_Records exist

IF sex=m AND material status =m THEN

+1 to Married\_Men

Else

+1 to Single\_Men

ENDIF

IF sex=f AND material status =m THEN

+1 to Married\_Women

Else

+1 to Single\_Women

ENDIF

ENDDO

4.IF sex=m AND material status=s AND age<30 THEN

record name and age to Bachlors\_Report

ENDIF

5.Print Married\_Men, Single\_Men, Married\_Women, Single\_Women

6.Print Bachlors\_Report

END

SPD problem : \_5\_\_

***A Defining diagram***

**Input**

**Processing**

**Output**

EmployeeRecords\*

\*Employee #, hours worked (in week), and pay

Get Employee #, hours worked in week, and pay

Calculate gross earnings

Calculate tax payable

Calculate medical levy

Calculate net earnings

print each employees individual Gross earnings, Tax payable, Medical levy, Net earnings

Employee#

Gross earnings

Tax payable

Medical levy

Net earnings\*\*

\*\*Gross earnings less 15% tax and 1% medical levy

***B Solution algorithm***

EmployeeMoneyCalculator

1. Get Employee #, hours worked in week, and pay

2. DOWHILE EmployeeRecords exist

GrossEarnings= HoursWorked\*Pay

TaxPayable= (GrossEarnings\*.15)

MedicalLevy= (GrossEarnings\*.1)

NetEarnings=((GrossEarnings-TaxPayable)-MedicalLevy)

ENDDO

3.Print Employee#, Gross earnings, Tax payable, Medical levy, Net earnings

END