

PBL Solution Template

PBL Problem Title

Average numbers

Week Number:

2.1

PBL Solution

Data

Inputs: (Name: Type)

year_born:integer

Outputs: (Name: Type)

years_old :integer

Constants : (Name: Type)

CURRENT_YEAR = 9999: integer (9999 represents current year value)

Algorithm

Begin

Input year_born

years_old = CURRENT_YEAR - year_born

Output "You were born in " year_born " and will be (are) " years_old " this year"

End

PBL Problem Title

BMI Calculation

Week Number:

2.2

PBL Solution

Data

Inputs: (Name: Type)

weight:double

height :double

Outputs: (Name: Type)

body_mass_index:double

Algorithm

Begin

Input weight

Input height

```
height = height / 100
body_mass_index = weight / (height * height)
```

```
Output "Your BMI is " body_mass_index
End
```

PBL Problem Title

Earth Weight to other planet weights conversion

Week Number:

2.3

PBL Solution

Data

Inputs: (Name: Type)

weight_on_earth:double

Outputs: (Name: Type)

weight_on_mercury:double

weight_on_venus:double

weight_on_jupiter:double

weight_on_saturn:double

Constants: (Name: Type)

EARTH_TO_MERCURY = 0.4: double

EARTH_TO_VENUS = 0.9: double

EARTH_TO_JUPITER = 2.5: double

EARTH_TO_SATURN = 1.1: double

Begin

Input weight_on_earth

weight_on_mercury = weight_on_earth * EARTH_TO_MERCURY;

weight_on_venus = weight_on_earth * EARTH_TO_VENUS;

weight_on_jupiter = weight_on_earth * EARTH_TO_JUPITER;

weight_on_saturn = weight_on_earth * EARTH_TO_SATURN;

Output "Weight on Earth " weight_on_earth " is "

Algorithm

"Weight on Planet Mercury " weight_on_mercury

"Weight on Planet Venus " weight_on_venus

"Weight on Planet Jupiter " weight_on_jupiter

"Weight on Planet Saturn " weight_on_saturn

End