

<p>Give an example of assigning an INPUT and OUTPUT statement [2]</p>	<p>PLP 4[1] What is meant by the term casting?</p>
<p>How do you find out the methods attached to a data type? [1]</p>	<p>PLP 5 [3] Explain the terms : 1. Selection 2. Sequence 3. Iteration</p>
<p>Part 2 How much space is required in RAM for the following: [5] 1. Integer 2. Float/Real 3. Char 4. String 5. Boolean value</p>	<p>PLP 6 What is meant by the term 'method'. [2]</p>
<p>PLP 2 Part 1 What does the term declaring a variable mean? [2]</p>	<p>PLP 8 State all 6 comparison operators and their uses</p>
<p>PLP 3 Name and give an example of 6 data types [6]</p>	<p>PLP 9 State all 6 arithmetic operators and their uses</p>

<p style="text-align: center;">number = 2</p> <p style="text-align: center;">Casting means changing the data type of a value. eg: str(number)</p>	<p style="text-align: center;">INPUT: age = int(input("what is your age?"))</p> <p style="text-align: center;">OUTPUT: print(age)</p>
<p>1. Selection If the condition is True do the code, if it isn't True don't do it.</p> <p>2. Sequence Code executes in a specific order, top to bottom left to right, unless directed to other procedures/functions.</p> <p>3. Iteration Where code continues to execute until told to stop, i.e. loops.</p>	<p style="text-align: center;">In the interactive window type dir(data type) i.e. dir(str) for string methods in python.</p>
<p>A method is a function that can be carried out on a related data type. For example the UPPER method can change strings to uppercase characters.</p>	<ol style="list-style-type: none"> 1. Integer 2 or 4 Bytes 2. Float/Real 4 or 8 Bytes 3. Char 1 byte 4. String 1 byte per char 5. Boolean value 1 byte
<p>< Smaller than > Greater than <= smaller than or equal to >= greater than or equal to == is equal to != is not equal to</p> <p>(= is an assignment operator for assigning variables name = "Bill")</p>	<p>Allocating a variable a data type so enough memory could be set aside. Not required in Python but is in other languages.</p> <p>ie Set name AS STRING name = "John"</p>
<p>// Integer division (no remainder) / float division * multiplication - subtraction + addition % remainder after integer division</p>	<p style="text-align: center;">String "Bob" Float 6.4 Integer 12 Char "A" Boolean True or False Lists ie Places = ["NY", "London"]</p>

PLP 10 Explain what a record is.

What are the rules for naming variables? [1]

PLP 11[1] Write a simple SQL statement to find all the people with a pet cat or fish
IDnumber Salutation Surname Pet
12 Mr Smith Cat
13 Mrs Smith Cat
14 Mr Jones Dog
15 Mr Ball Cat
16 Mrs Jones Rabbit
17 Mr Smithes Fish
The data is stored in a table called ownersTBL.

What does the term assigning a variable mean? [1]

PLP 12 In python store the following information in a 2D list
1952 Helsinki
1956 Melbourne
1960 Rome
1964 Tokyo
Write code to retrieve:
i. The first element
ii. The second element of the second element.

What is a constant variable and how is it defined? [2]

PLP 14
State advantages of procedures/functions

What is a statement? [1]

PLP 15 Distinguish between a BOOLEAN DATA TYPE and BOOLEAN operator

What is a variable? [3]

No spaces
Unique
Lowercase, unless
CONSTANTS

A record is a collection of related data, the data fields (items) could be different. I.e. list in Python or rows in Excel or database record

ie VAT = 20, allocating a value to a variable name

```
SELECT Salutation, Surname,  
       Pet  
FROM ownersTBL  
WHERE Pet="Cat" OR Pet  
       ="Fish"
```

Variable value that never changes during running of program, i.e. VAT = 20, and the name is written in CAPS.

```
lists = [[1952, "Helsinki"], [1956, "Melbourne"],  
         [1960, "Rome"], [1964, "Tokyo"]]
```

Write code to retrieve:

i. the first element

```
print(lists[0])
```

ii. the second element of the second element.

```
print(lists[1][1])
```

A single line of code

Procedures can be reused, reducing the need to type repetitive code. It's easier to debug code in a procedure because each procedure can deal with a different problem (decomposition = breaking a large problem into smaller ones)

A named location in memory where information is stored. The value of the information can change during the running of the program.

A BOOLEAN operator is AND
OR NOT
A BOOLEAN DATA TYPE is
True or False

Write code to use a method
to convert a name to
uppercase. [1]

Write code to use a method to convert
a name to uppercase. [1]

```
name="joe"  
name.upper()  
>>> JOE
```
