

INFORMATICS PRACTICES CH 4 Data Handling – WS1

1

Which data type will be used to represent the following data values and why?

a) Age of a person

b) Student's name

c) List of subjects chosen by a student

d) Whether a student has submitted homework or not

2

Identify the data types of the values given below?

a)	[3,13,2]		b)	4.5j	
c)	13.0		d)	1-2j	
e)	(3,13,2)		f)	{'a':0, 'b':23}	

3

What will be the output for the following?

a)	print(len(str(17//4)))	
b)	print(len(str(17/4)))	

4

What will be the output produced by these ?

a)	12/4	3.0
b)	14//14	1
c)	14%4	2
d)	14.0/4	3.5
e)	14.0//4	3.0
f)	14.0%4	2.0

5

Meera is building a student profile system using Python. She uses different data types to store various pieces of information:

- The student's permanent address is stored as a string
- The names of club members are stored in a list
- The student's registered subjects are stored in a tuple
- The student's performance record (subject: marks) is stored in a dictionary

a) Identify which of these data types are mutable and which are immutable.

b) Meera tried to update one subject in the tuple of registered subjects but got an error. Explain why this error occurred and suggest how she can store updatable subjects instead.

6

Write the python program to input a string and print it 100 times.

Predict the output of the following Python code snippets:

a	<pre>a = "Hello" a[0] = "h" print(a)</pre>	
b	<pre>b = [1, 2, 3,4,5,6,7,8,9,10] b[1] = 4 print(b)</pre>	
c	<pre>c = (10, 20, 30) c[1] = 25 print(c)</pre>	
d	<pre>d1 = {'name': 'Aswin', 'city': 'London'} d1['city'] = 'Nizwa' print(d1)</pre>	
e	<pre>s = "PythonProgramming" a) print(s[-1]) b) print(s[1]) c) print(s[20])</pre>	
f	<pre>C=10-6.5j print(C.real) print(C.imag)</pre>	
g	<pre>A=True+True B=False+True print(A) print(A-B)</pre>	