

ITP122 Assessment 1 Tasks

Task 1: Fundamental Input/output programming

- (a) Identify the industry-standard integrated development environment (IDE) for Python. As a beginner, which IDE would you opt to use? Justify your answer.
- (b) Write a script in Python that prints (displays) your name, address and telephone number.
- (c) Write a Python program which accepts the user's first and last name as an input and prints them in reverse order with a space between them.
- (d) Write an interactive program. Prompt the user with a question, e.g., “What is your favorite number from 0 to 9?” Save the user selection into a variable, e.g., `b=input (“What is your Favorite number from 0 to 9?”)`.

It’s that simple. Did you notice the input function?

Here is another example. Write the code in a new file and display YOUR name.

Example

Use the prompt parameter to write a message before the input:

```
x = input('Enter your name:')  
print('Hello, ' + x)
```

Task 2: Simple calculation programming

- (e) Now, try entering the following arithmetic expressions using only a single operator in each case. Note the response from the interpreter in each case and describe the answers and what you understand from it. (To describe the answers, you can use comments in code or alternatively use ‘print’ Python statement to display your answer).

➤ `4 + 2`

- $4 + 2.0$ (Note the difference from the previous line)
- $3.5 - 4.0$
- $5 * 7$
- $23 / 4$
- $23 / 4.0$ (Note the difference from the previous line)
- $23 \% 4$
- $3 ** 2$
- $9 ** 0.5$ (Note: Refer to Learning Activity 3 in Module 2)

Task 3: Programming for text input/output

- (f) Write a Python program to print the following string in a specific format (see the output). Use escape sequences in the string '\t' and '\n' Sample String:

"Baby baby, Yes Mama, Eating sugar, No Mama, Telling a lie, No Mama, Open your mouth, Ha Ha Ha!"

Expected Output:

```

Baby baby,
           Yes Mama,
Eating sugar,
           No Mama,
Telling a lie,
           No Mama,
Open your mouth,
           Ha Ha Ha!

```

vii. 'b' raised to power a

4. Print the results of all operations on variables

Task 4: Simple coding for case example

You are hired as a software coder for LoseWeightNow Pty Ltd located in Redfern, NSW, Australia. Your task is to build a simple software program that receives input from the patients including their first

name, last name, age, body weight, and body height; your software program is to calculate the body mass index (BMI) of the patient, and display the output as

“Welcome + First Name + Last Name. Your age is Age and your BMI is BMI Value”.

For example, if Adam Smith, 19 years old having BMI of 22.5 will display

“Welcome Adam Smith. You are 19 years old and your BMI is 22.5”

Write software program to accomplish the above given task.