

ANSWER KEY

PYTHON WORKBOOK – SECTION 1

Introduction to Python

Programmer's Hub – by CodeWithVivek
<https://www.youtube.com/@code-with-vivek>

1.1 What is Python?

Do You Understand?

- A high-level language means it is closer to human language and abstracts low-level machine details.
 - Python is used in AI because of powerful libraries (NumPy, TensorFlow), fast prototyping, and clean syntax.
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1.2 Installing Python

Debug This:

If `python --version` fails →

✓ Python is not added to PATH.

1.3 First Python Program

Your Turn (sample answer):

```
name = "Vivek"
```

```
age = 30
```

```
print("My name is", name, "and I am", age, "years old.")
```

Do You Understand?

- `print()` outputs text.
 - Removing quotes creates a `NameError`.
-

1.4 How Python Executes Code

Try This (answers vary):

- Interactive Mode → Executes line-by-line
- Script Mode → Executes saved .py file

1.6 Input & Output

Try This (sample answer):

```
a = int(input("Enter first number: "))  
b = int(input("Enter second number: "))  
print("Sum =", a + b)
```

Debug This:

`input()` returns a **string**, so `"5" + 5` → error.

1.7 Comments

Correct answer → write comments using `#` or triple quotes.

Mini Assignment Solution (sample):

```
print("My name is Vivek")  
print("My goal is to become a Python expert")  
  
age = int(input("Enter your age: "))  
print(f"Next year, you will be {age + 1} years old.")  
  
# This program prints name and goal  
# It asks user age  
# It prints next year's age
```