

1. What is a syntax error?

A Syntax error occurs when the code does not follow the rules or grammar of python language. These errors stop the program from running:

2. What is a logic error?

A logic error happens when the program runs without crashing, but it gives the wrong result because the logic of code is incorrect.

3. How can you find an error in a program?

1. Testing the program with different inputs.

2. Reading the error message.

3. Using debugging tools or printing values to check what the code is doing.

4. Give one example of a logic error in Python code. Explain why it is incorrect.

Example:

```
total = 10 * 2 + 5
```

Reason why it is incorrect: If the intention was to add 2 to 5 first and then do multiplication with 10.

5. Read the following Python code. Identify the logic error and explain how to fix it.

```
length = 8
```

```
width = 3
```

```
area = length + width
```

```
print("The area is", area)
```

formula should be length * width

corrected version:

```
area = length * width
```

6. Read this Python code. There are ^{two} ~~three~~ syntax errors in it. Work together to identify each error. Rewrite the code with the correct syntax.

```
meters= int(input("Enter the number of meters")
centimeter=meters X 100
print(meters, "is", centimeter, "centimeters")
```

```
meters = int(input("Enter the number of meters"))
centimeter = meters * 100
print(meters, "is", centimeter, "centimeters")
```

7. Read this Python code. There are ^{four} ~~three~~ syntax errors in it. Work together to identify each error. Rewrite the code with the correct syntax.

```
name = input("What is your name?
print("Hello" + name)
if name = "Ali":
print("Nice to meet you")
```

```
name = input("What is your name?")
print("Hello" + name)
if name == "Ali":
print("Nice to meet you")
```

8. Read this Python code. There are ~~three~~ ^{two} syntax errors in it. Work together to identify each error. Rewrite the code with the correct syntax.

```
num1 = input("Enter first number")
num2 = input("Enter second number")
sum = num1 + num2
print("The sum is" sum)
```

```
num1 = int(input("Enter first number"))
num2 = int(input("Enter second number"))
sum = num1 + num2
print("The sum is", sum)
```

Task 13: Programming Terms (Q & A - 1.15)



Task 11: Python Practice (Q & A - 1.11)

1. What is the command word to read input from the user?

`input()`

2. Identify the error in this line of Python code.

```
input("Enter a colour") = colour
```

The assignment is written the wrong way around. You assign

corrected version
`colour = input("Enter a colour")`

3. Describe what happens in this program.

```
first = int(input("Enter a number"))  
second = int(input("Enter a number"))  
print(first/second)
```

Takes input two numbers, converts them to integer data type, using divides them and prints the result.

the result of the input to the variable.

4. What type of value does the `input()` function return by default in Python?

It returns a string by default, even if the user types a number

5. Identify and correct the error in this line of Python code:

```
age = input "Enter your age"
```

Missing parenthesis around the input prompt.
Correction: `age = input("Enter your age")`

6. Read the following code. What does it do, and what type of input is expected?

```
name = input("What is your name? ")  
print("Hello", name)
```

The program asks the user to enter their name and greets them.

Expected input: A string (name)

Example output:

```
What is your name? Ali  
Ali  
Hello Ali
```

Task 10: Data Type Decisions (Q & A - 1.10)

1. Identify the most appropriate data type for each of the items described.

S.No	Description	Example	Most Appropriate Data Type
I.	Number of books that you own	25	Integer
II.	Favorite color	Purple	String
III.	Amount of money given each week	2.50	float / or Real
IV.	The first letter of your first name	V	String
V.	Age	12	integer

2. Give one example of an Integer number.

42

3. Give two examples of data that can be a Character and a String.

String: Hello
string: A

Python doesn't have a separate character data type. It only has string.

4. What is the difference between an Integer and a Real number?

Integer: Whole numbers with no decimal e.g 10
Float or Real: Number with a decimal e.g 10.5

5. What is the difference between a String and a Character?

String: A sequence of characters (e.g. "Apple" or "23")

Character: A single letter, number or symbol (e.g. "A" or "5")

Note: but in python, both are treated as string

Task 9: Valid or Invalid ? (Q & A 1.9)

1. Identify whether each identifier is valid (allowed), or invalid (not allowed) for Python. If it is invalid, state why.

S.No	Identifier	Valid / Invalid	If Invalid, State the Reason
I.	myNumber	valid	follows naming rules
II.	29Value	Invalid	cannot start with a number
III.	My Name	Invalid	contains a space
IV.	myvar 29Value	valid	
V.	\$money My Name	Invalid	no characters other than _ is allowed.
VI.	print Print	invalid	cannot be a python reserved word
VII.	the_Total	Valid	Under score is allowed
VIII.	Numberentere d	Invalid	Name is broken across two lines

2. Code Detective: The following code snippet contains **four** invalid variable names. **Circle** the invalid ones. Be careful, some may be tricky!

```

1score = 95 Invalid (1score → cannot start with a number)
student name = "Ali" Invalid (student name → contains a space)
grade_point = 3.8 valid
total$marks = 450 Invalid (total$marks → contains a $ symbol)
def = "Passed" Invalid (def is a reserved keyword)
averageMarks = total$marks / 5
subjectList = ["Math", "Science", "English"] valid
_pass = True valid
classLevel = 7 valid
print("Student Info:") valid
print(student name) Invalid (uses an invalid variable name)
print("Grade Point:", grade_point) valid
print("Subjects:", subjectList) valid
    
```

Task 8: Python Know-how (Q & A - 1.8)

1. What is the command word to do output in Python?

print

2. What punctuation do you put around a message in Python to output the message?

quotation marks " "

3. What will be the difference between the output from these two print statements?

`P.print("Good morning")` → it has capital G

`P.PRINT("good morning!")` → it has lowercase g and ends with !

4. What is the error in this statement? Rewrite the statement pointing out the correction.

`print("The sky is blue)` quotation mark is missing

corrected: `print("The sky is blue")`

5. What is the error in this statement? Rewrite the statement pointing out the correction.

`PRINT("Grass is green")` PRINT should be in lowercase.

corrected: `print("Grass is green")`

6. Write a statement to output your name.

`print("My name is Alex")`

7. Write a Python program to output a list of facts about yourself.

`print("My name is Ali")`

`print("I love playing tennis")`

`print("I enjoy coding")`

`print("My favorite food is pizza")`

Task 7: Code Practice (Unplugged activity 1.11)

C.W

Friday, April 3, 2026

a) Read this line of code:

```
print("My favorite color is purple")
```

Write this line of code in the space provided below, but change it so that it will output your favorite color and your partner's favorite color.

Annotate this to identify the main features, such as the command words and brackets.

Include a second example with an entirely different message to be output.

```
1. print("My favorite color is blue and my partner's favorite color is green")
```

print → Command word: A python built-in function used to display output.

() → Brackets: Enclose the data you want to print

"My favorite color is blue and my partner's favorite is green"

→ string: Text inside double quotes that will be printed.

b) Read this line of code:

```
print("I like to travel the world")
```

Modify this line of code and write the modified version in the space provided below, to output your favorite travel destination and your partner's favorite destination.

Annotate the line to identify the key parts of the code, such as the function name and quotation marks.

Provide a second example with a different message to be output.

```
1. print("My favorite destination is Japan and my friend's favourite is Italy")
```

{ same block so dont need to write.