Worksheet 03: Python String Basics

Name: _____ Date: _____

Instructions

- Answer in the blanks.
- For "write code" questions, write valid Python code.
- For "what does it print" questions, write the exact output.

Part A — Strings and Quotes

1) What is a string?
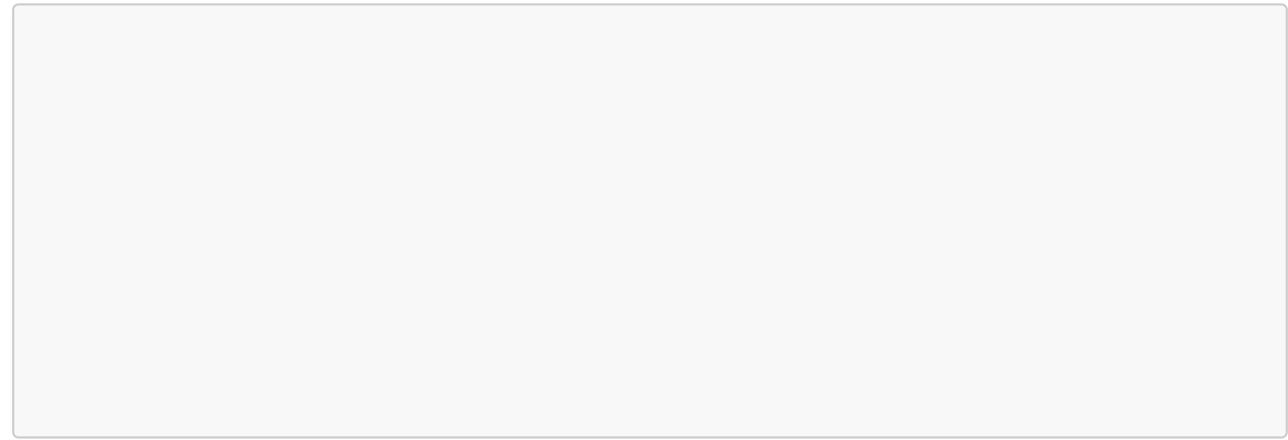
A **string** is _____ in Python.

Write two examples of strings:

```python
# example 1
a =

# example 2
b =
```

2) Create four string variables

Write Python code to create these variables:

- `name` with value `"Alice"`
- `pet` with value `"bunny"`
- `greeting` with value `"Hello, world!"`
- `empty_string` with value `""` (an empty string)

3) Which one is the empty string?

Look at the code:

```
a = "cat"
b = ""
c = " "
d = "dog"
```

Fill in:

1. The **empty string** variable is: _____
2. The string that has **one space** inside is: _____

Part B — String concatenation with $+$

4) What does this print?

```
print("Py" + "thon")
```

Output:

5) Add a space in the middle

Fill in the blank so the output becomes `Harry Potter` .

```
first_name = "Harry"
last_name = "Potter"

full_name = first_name + _____ + last_name
print(full_name)
```

6) Join three words

What does this print?

```
a = "I"
b = "love"
c = "Python"

print(a + " " + b + " " + c)
```

Output:

Part C — Indexing (one character)

7) One character by index

```
word = "ABCDEF"
print(word[0])
print(word[2])
print(word[5])
```

Output:

8) Index practice with `"bunny"`

```
pet = "bunny"
print(pet[0])
print(pet[1])
print(pet[4])
```

Output:

Part D — Slicing (a piece of a string)

9) Slice warm-up

```
word = "ABCDEF"
print(word[0:2])
print(word[2:6])
```

Output:

10) More slices

```
word = "ABCDEF"
print(word[1:4])
print(word[3:5])
```

Output:

11) Slice + concatenation

```
word = "ABCDEF"
part1 = word[0:3]
part2 = word[3:6]
print(part2 + part1)
```

Output:

Part E — Converting numbers to strings with `str()`

12) Fix the TypeError (string + number)

This code will cause an error. Fix it using `str()` .

```
age = 11
message = "I am " + age + " years old."
print(message)
```

Write the corrected code:

13) Fill in the blank

Fill in the blank so the output becomes `I have 5 apples.`

```
apples = 5
message = "I have " + _____ + " apples."
print(message)
```

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14) What does this print?

```
age = 11
age_text = str(age)

print(type(age))
print(type(age_text))
```

Output:

Part F — Mini coding tasks

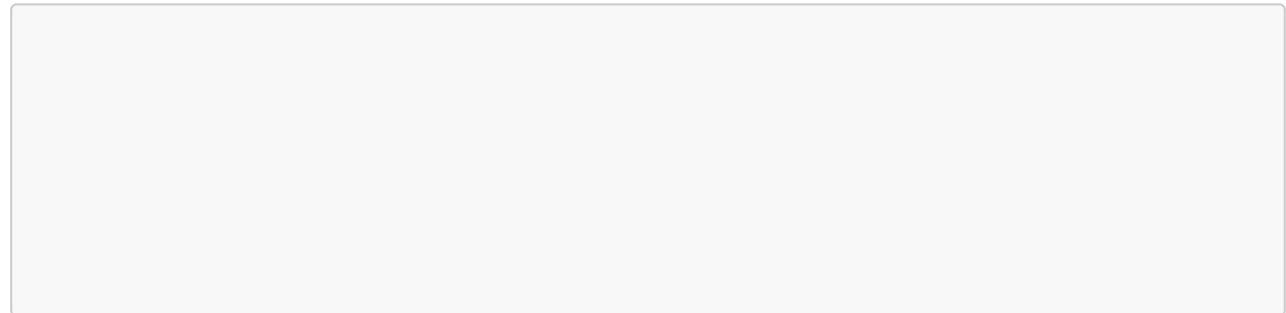### 15) Make a full name and a message

Write code that prints exactly this:

```
My name is Chelsea Wang.
I am 11 years old.
```

Start with these variables:

```
first_name = "Chelsea"
last_name = "Wang"
age = 11
```

Complete the code:

16) Challenge: Fix the broken program

This program is almost correct, but it has a mistake.

```
first = Harry
last = Potter
age = 11

print("Name: " + first + " " + last)
print("Age: " + age)
```

Fix it so it prints:

```
Name: Harry Potter
Age: 11
```

Write the corrected code: