Worksheet 01: Python Variables and Types

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 — Variables and Values

1) Variable name vs value

Look at the code:

```
favorite_food = "ice cream"
```

Fill in the blanks:

- Variable name: _____
- Value: _____

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2) Create three variables

Write Python code to create these variables:

- `age` with value `12`
- `height` with value `1.52`
- `student` with value `"Mia"`

```
```

3) Match variable names and values

Look at the code:

```
x = 5
y = 7
message = "Hi"
```

Fill in:

- `x` stores the value: _____
- `y` stores the value: _____
- `message` stores the value: _____

Part B — Types (`int`, `float`, `str`)

4) What are the types?

For each variable, write `int`, `float`, or `str`.

```
a = 0
b = -3
c = 2.75
d = "Hello"
e = "42"
```

1. `a` is _____
2. `b` is _____
3. `c` is _____
4. `d` is _____
5. `e` is _____

5) True or False

Write **True** or **False**.

1. `"123"` is a string. _____
2. `123` is an integer. _____
3. `3.0` is a float. _____
4. `"3.0"` is a float. _____

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6) Make it the type you want

Start with this code:

```
x = 7
```

Change `x` to be:

- a **float** (decimal number): _____
- a **string** (text): _____

(Write two different lines of Python code.)

Part C — `print(...)`

7) What does this print?

```
name = "Alex"
print(name)
```

Output:

```

```

---

8) Print text + a variable

```
student = "Chelsea"
print("Student:", student)
```

Output:

```
```

9) Print two lines

```
food = "pizza"
number = 3
print(food)
print(number)
```

Output:

```
```

10) Print multiple values on one line

```
x = 2
y = 10
print("x =", x, "y =", y)
```

Output:

```
```

Part D — Quotes vs no quotes

11) What is the difference?

```
animal = "cat"
print(animal)
print("animal")
```

Output:

```

```

Then answer:

- `animal` (no quotes) prints: _____
- `"animal"` (with quotes) prints: _____

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12) Spot the mistake (strings need quotes)

This code has a problem. Fix it.

```
name = Chelsea
print(name)
```

Write the corrected code:

```
# corrected code


```

Part E — `type(...)`

13) What does this print?

```
x = 3
y = 3.0
z = "3"

print(type(x))
print(type(y))
print(type(z))
```

Output:

```

```

14) Types practice

```
score = 95
pi = 3.142
word = "Python"
```

Fill in:

- `type(score)` is _____
- `type(pi)` is _____
- `type(word)` is _____

Part F — Mini coding tasks

15) Make a simple “profile”

Create variables for:

- `name` (a string)
- `age` (an int)
- `height` (a float)

Then print **three lines** like this (your values can be different):

```
Name: Mia
Age: 12
Height: 1.52
```

Write your code:

16) Challenge: Print types and values

Create these variables:

- `a = 5`
- `b = 2.5`
- `c = "5"`

Then print (in any order): - the value of each variable - and the type of each variable

Write your code: