Worksheet 04: Python If Statements

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.
- Remember: code inside an `if` block must be indented with **4 spaces**.

Part A — Conditions (True or False)

1) True or False

For each expression, write `True` or `False`.

1. `5 > 3` is _____
2. `10 <= 9` is _____
3. `7 == 7` is _____
4. `8 != 8` is _____
5. `3 + 4 > 10` is _____

2) Fill in the comparison

We want the program to print `"Small"`. Fill in the blanks.

```
number = 7

if number _____ 10:
    print("Small")
```

Part B — Simple `if` and Indentation

3) What does it print?

```
age = 11

if age >= 10:
    print("A")
    print("B")

print("C")
```

Output:

4) What does it print?

```
score = 100

if score > 90:
    print("Great job!")
    print("You got an A!")
```

Output:

5) What does it print?

```
score = 80

if score > 90:
    print("Great job!")
    print("You got an A!")
```

Output:

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6) Write code (simple `if`)

Write code so it prints `"It's a hot day!"` when `temperature > 30` .

```
temperature = 32

# Write your if-statement below:
```

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7) Spot the indentation mistake

This code has an indentation problem. Fix it.

```
age = 11

if age >= 10:
print("You are 10 or older!")
print("Welcome to the game!")
```

Corrected code:

Part C — `if-else` (two-way choice)

8) Even or Odd?

What is the output?

```
number = 8

if number % 2 == 0:
    print("Even")
else:
    print("Odd")
```

Output:

9) Cold or Warm?

- We want it to print `"Cold"` when `temperature` is less than 20.
- Fill in the blank to complete the code.
- Write the expected output.

```
temperature = 19

if _____:
    print("Cold")
else:
    print("Warm")
```

Output:

10) Can you ride the roller coaster?

Firstly fill in the blanks to complete the code.

- Print `"You can ride the roller coaster!"` if `height >= 120`
- Otherwise print `"Sorry, you are not tall enough."`

Then write the expected output.

```
height = 115

if _____:
    print("_____")
else:
    print("_____")
```

Output:

11) Do you pass the exam?

What is the output?

```
score = 55

if score >= 60:
    print("You passed!")
else:
    print("Try again next time!")
```

Output:

12) Write code (even or odd)

Write a complete `if-else` program that prints `"Even"` when `number` is even,
otherwise prints `"Odd"`.

```
number = 13
```

13) Fix the `else`

The `else` is in the wrong place. Fix the code.

```
number = 5

if number % 2 == 0:
    print("Even")
    else:
        print("Odd")
```

Corrected code:

Part D — `if-elif-else` (many choices)

14) What does it print?

```python
score = 72

if score >= 90:
    print("Grade A")
elif score >= 80:
    print("Grade B")
elif score >= 70:
    print("Grade C")
else:
    print("Grade D or below")
```

Output:

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15) Ticket price

Complete the code using `if-elif-else` :

- If `age < 5` , print `"Free"`
- Else if `age < 18` , print `"Ticket: 10"`

- Else print `"Ticket: 15"`

```
age = 12
```

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16) Order matters!

What is the output? (Remember: Python checks from top to bottom and stops at the first `True`.)

```python
score = 95

if score >= 60:
    print("Pass")
elif score >= 90:
    print("Grade A")
else:
    print("Fail")
```

Output: