Solution 04: Python If Statements

1) True or False

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

2) Fill in the comparison

Missing part: `<`

```
number = 7

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

3) What does it print?

```
age = 11

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

print("C")
```

Output:

```
A
B
C
```

4) What does it print?

```
score = 100

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

Output:

```
Great job!
You got an A!
```

5) What does it print?

```
score = 80

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

Output: *(no output — nothing is printed)*

```

```

6) Write code (simple `if`)

One correct answer:

```
temperature = 32

if temperature > 30:
    print("It's a hot day!")
```

7) Spot the indentation mistake

Corrected code:

```
age = 11

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

8) Even or Odd?

```
number = 8

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

Output:

```
Even
```

9) Cold or Warm?

Missing condition: `temperature < 20`

```
temperature = 19

if temperature < 20:
    print("Cold")
else:
    print("Warm")
```

Output:

```
Cold
```

10) Can you ride the roller coaster?

```
height = 115

if height >= 120:
    print("You can ride the roller coaster!")
else:
    print("Sorry, you are not tall enough.")
```

Output:

```
Sorry, you are not tall enough.
```

11) Do you pass the exam?

```
score = 55

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

Output:

```
Try again next time!
```

12) Write code (even or odd)

One correct answer:

```
number = 13

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

13) Fix the `else`

Corrected code:

```
number = 5

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

14) What does it print?

```
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:

```
Grade C
```

15) Ticket price

One correct answer:

```
age = 12

if age < 5:
    print("Free")
elif age < 18:
    print("Ticket: 10")
else:
    print("Ticket: 15")
```

Output:

```
Ticket: 10
```

16) Order matters!

```
score = 95

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

Output:

```
Pass
```

Explanation: `score >= 60` is already True, so Python prints `"Pass"` and skips the `elif`.