

Easy Python Condition Exercises

Exercise 1: Even or Odd Checker

Problem: Check if a number is even or odd.

python

```
number = int(input("Enter a number: "))
```

```
if number % 2 == 0:
```

```
    print("Even")
```

```
else:
```

```
    print("Odd")
```

Exercise 2: Positive, Negative, or Zero

Problem: Check if number is positive, negative, or zero.

python

```
num = float(input("Enter a number: "))
```

```
if num > 0:
```

```
    print("Positive")
```

```
elif num < 0:
```

```
    print("Negative")
```

```
else:
```

```
    print("Zero")
```

Exercise 3: Voting Eligibility

Problem: Check if person can vote (age \geq 18).

python

```
age = int(input("Enter your age: "))
```

```
if age >= 18:
```

```
    print("You can vote!")
```

else:

```
years_left = 18 - age
print(f'Wait {years_left} more years to vote')
```

Exercise 4: Simple Calculator

Problem: Add or subtract two numbers based on user choice.

python

```
num1 = float(input("Enter first number: "))
num2 = float(input("Enter second number: "))
operation = input("Enter '+' to add, '-' to subtract: ")
if operation == '+':
    result = num1 + num2
    print(f'{num1} + {num2} = {result}')
elif operation == '-':
    result = num1 - num2
    print(f'{num1} - {num2} = {result}')
else:
    print("Invalid operation")
```

Exercise 5: Compare Two Numbers

Problem: Find which number is larger.

python

```
a = float(input("Enter first number: "))
b = float(input("Enter second number: "))

if a > b:
    print(f'{a} is greater than {b}')
elif b > a:
```

```
print(f'{b} is greater than {a}')
else:
    print("Both numbers are equal")
```

Exercise 6: Check Alphabet

Problem: Check if character is an alphabet letter.

```
python
char = input("Enter a character: ")
if char.isalpha():
    print("It's an alphabet letter")
else:
```

```
    print("It's NOT an alphabet letter")
```

Exercise 7: Simple Password Check

Problem: Check if password is correct.

```
python
correct_password = "python123"
password = input("Enter password: ")
```

```
if password == correct_password:
```

```
    print("Access granted")
```

```
else:
```

```
    print("Access denied")
```

Exercise 8: Grade Calculator

Problem: Convert score to letter grade.

```
python
score = float(input("Enter your score (0-100): "))
```

```
if score >= 90:
    grade = "A"
elif score >= 80:
    grade = "B"
elif score >= 70:
    grade = "C"
elif score >= 60:
    grade = "D"
else:
    grade = "F"
```

```
print(f"Your grade is: {grade}")
```

Exercise 9: Check Leap Year

Problem: Check if year is leap year.

python

```
year = int(input("Enter a year: "))
```

```
if (year % 4 == 0 and year % 100 != 0) or (year % 400 == 0):
```

```
    print(f"{year} is a leap year")
```

```
else:
```

```
    print(f"{year} is NOT a leap year")
```

Exercise 10: Temperature Warning

Problem: Give weather advice based on temperature.

python

```
temp = float(input("Enter temperature (°C): "))
```

```
if temp > 30:
    print("It's hot! Drink water")
elif temp > 20:
    print("Nice weather")
elif temp > 10:
    print("A bit chilly")
else:
    print("It's cold! Wear a jacket")
```

Exercise 11: Check Divisibility

Problem: Check if number is divisible by 5.

python

```
num = int(input("Enter a number: "))
```

```
if num % 5 == 0:
    print(f"{num} is divisible by 5")
else:
    print(f"{num} is NOT divisible by 5")
```

Exercise 12: Simple Menu

Problem: Show different messages based on menu choice.

python

```
print("Menu:")
print("1. Say Hello")
print("2. Say Goodbye")
print("3. Exit")
```

```
choice = input("Enter choice (1, 2, or 3): ")
```

```
if choice == "1":
    print("Hello!")
elif choice == "2":
    print("Goodbye!")
elif choice == "3":
    print("Exiting...")
else:
    print("Invalid choice")
```

Exercise 13: Check Uppercase/Lowercase

Problem: Check if letter is uppercase or lowercase.

python

```
letter = input("Enter a single letter: ")
```

```
if letter.isupper():
    print("Uppercase letter")
elif letter.islower():
    print("Lowercase letter")
else:
    print("Not a single letter")
```

Exercise 14: Check Valid Age

Problem: Check if age is valid (between 0-120).

python

```
age = int(input("Enter age: "))
```

```
if age >= 0 and age <= 120:
```

```
print("Valid age")
```

```
else:
```

```
print("Invalid age")
```

Exercise 15: Compare Three Numbers

Problem: Find largest of three numbers.

```
python
```

```
a = float(input("Enter first number: "))
```

```
b = float(input("Enter second number: "))
```

```
c = float(input("Enter third number: "))
```

```
if a >= b and a >= c:
```

```
    largest = a
```

```
elif b >= a and b >= c:
```

```
    largest = b
```

```
else:
```

```
    largest = c
```

```
print(f"Largest number is: {largest}")
```

Exercise 16: Check Empty String

Problem: Check if string is empty.

```
python
```

```
text = input("Enter some text: ")
```

```
if text:
```

```
    print("Text entered")
```

```
else:
```

```
    print("No text entered")
```

Exercise 17: Simple Quiz

Problem: Ask a question and check answer.

```
python
print("What is 5 + 3?")
answer = int(input("Your answer: "))

if answer == 8:
    print("Correct!")
else:
    print(f"Wrong! The correct answer is 8")
```

Exercise 18: Check Weekday/Weekend

Problem: Check if day is weekday or weekend.

```
python
day = input("Enter day of week: ").lower()

if day in ["monday", "tuesday", "wednesday", "thursday", "friday"]:
    print("Weekday")
elif day in ["saturday", "sunday"]:
    print("Weekend")
else:
    print("Invalid day")
```

Exercise 19: Check Number Range

Problem: Check if number is between 1 and 100.

```
python
num = float(input("Enter a number: "))
```

```
if 1 <= num <= 100:
    print(f"{num} is between 1 and 100")
else:
    print(f"{num} is NOT between 1 and 100")
```

Exercise 20: Simple Discount

Problem: Apply discount if purchase is over \$100.

python

```
purchase = float(input("Enter purchase amount: $"))
```

```
if purchase > 100:
    discount = purchase * 0.10
    final_price = purchase - discount
    print(f"Discount applied! You saved ${discount:.2f}")
    print(f"Final price: ${final_price:.2f}")
else:
    print(f"No discount. Total: ${purchase:.2f}")
```

Exercise 21: Check Triangle Type

Problem: Check if triangle is equilateral.

python

```
side1 = float(input("Enter side 1: "))
```

```
side2 = float(input("Enter side 2: "))
```

```
side3 = float(input("Enter side 3: "))
```

```
if side1 == side2 == side3:
    print("Equilateral triangle")
```

```
else:
```

```
print("NOT equilateral triangle")
```

Exercise 22: Check File Type

Problem: Check if file is a Python file.

```
python
```

```
filename = input("Enter filename: ")
```

```
if filename.endswith(".py"):
```

```
    print("Python file")
```

```
else:
```

```
    print("Not a Python file")
```

Exercise 23: Check Palindrome (Simple)

Problem: Check if two-letter word reads same both ways.

```
python
```

```
word = input("Enter a two-letter word: ").lower()
```

```
if len(word) == 2 and word[0] == word[1]:
```

```
    print("It reads same both ways!")
```

```
else:
```

```
    print("Doesn't read same both ways")
```

Exercise 24: Check Age Group

Problem: Classify person as child, teen, or adult.

```
python
```

```
age = int(input("Enter age: "))
```

```
if age < 13:
```

```
    print("Child")
```

```
elif age < 20:  
    print("Teen")
```

```
else:
```

```
    print("Adult")
```

Exercise 25: Simple Login System

Problem: Check username and password.

```
python
```

```
correct_username = "admin"
```

```
correct_password = "1234"
```

```
username = input("Enter username: ")
```

```
password = input("Enter password: ")
```

```
if username == correct_username and password == correct_password:
```

```
    print("Login successful!")
```

```
else:
```

```
    print("Login failed")
```

Condition Basics Summary:

Basic Syntax:

```
python
```

```
if condition:
```

```
    # do something
```

```
elif another_condition:
```

```
    # do something else
```

```
else:
```

```
    # do if no conditions are true
```

Comparison Operators:

- == equals
- != not equals
- > greater than
- < less than
- >= greater than or equal
- <= less than or equal

Logical Operators:

- and - both must be true
- or - at least one must be true
- not - reverse the condition

Common Conditions:

python

Check if number is positive

if num > 0:

Check if string is empty

if not text:

Check if item is in list

if item in my_list:

Check multiple conditions

if condition1 and condition2:

Practice Tips:

1. Test with different inputs

2. Try writing conditions in different ways
3. Add more conditions to make exercises more complex
4. Combine multiple conditions using and, or
5. Try nesting conditions (if inside if)