EXERCISES FOR THE BASICS:

1. Given three sides of a triangle, determine whether it is an equilateral, isosceles, or scalene triangle.
2. Check if a number is positive, negative, or zero, and also if it's even or odd.
3. Calculate an employee's bonus based on years of service:

    Less than 5 years: 5% of salary

    5-10 years: 10%

    More than 10 years: 15%

4. if a password meets security standards (at least 8 characters, contains a number, uppercase letter, and special character).
5. Given the time (0-23), print a greeting:

    0-5: "Good Night"

    6-11: "Good Morning"

    12-17: "Good Afternoon"

    18-23: "Good Evening"

6. Given a number, reverse it and check if it's a palindrome.
7. Compute the BMI from height and weight, then categorize it:

    BMI < 18.5: Underweight
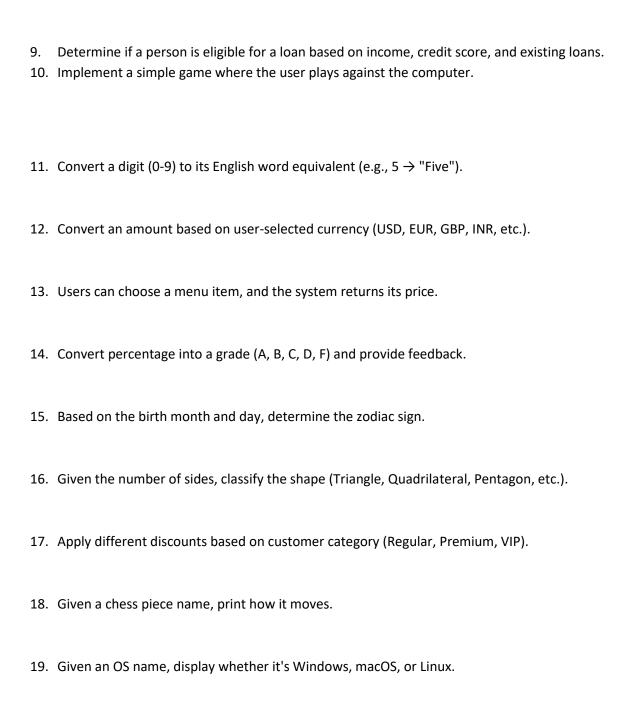
    18.5 - 24.9: Normal

    25 - 29.9: Overweight

    30+: Obese

8. Compute an electricity bill based on usage:

    First 100 units: $0.50 per unit

Next 200 units: $0.75 per unit

Above 300 units: $1.20 per unit

9. Determine if a person is eligible for a loan based on income, credit score, and existing loans.
10. Implement a simple game where the user plays against the computer.

11. Convert a digit (0-9) to its English word equivalent (e.g., 5 → "Five").

12. Convert an amount based on user-selected currency (USD, EUR, GBP, INR, etc.).

13. Users can choose a menu item, and the system returns its price.

14. Convert percentage into a grade (A, B, C, D, F) and provide feedback.

15. Based on the birth month and day, determine the zodiac sign.

16. Given the number of sides, classify the shape (Triangle, Quadrilateral, Pentagon, etc.).

17. Apply different discounts based on customer category (Regular, Premium, VIP).

18. Given a chess piece name, print how it moves.

19. Given an OS name, display whether it's Windows, macOS, or Linux.

20. Charge a fee based on vehicle type (car, truck, motorcycle, bus).

21. Assign a variable a value based on user input and process it.

22. Use arithmetic operations to swap two numbers.

23. Declare an array of the first 10 prime numbers and print them.

24. Generate a random number between 1-100 and store it in a variable.

25. Declare a LocalDateTime variable and format it into a readable string.

26. Take a user's full name and format it as "Last Name, First Name".

27. Given a sentence, reverse the words using concatenation.

28. Take a user's input and generate a personalized URL (e.g., www.user123.com).

29. Construct a log message with a timestamp, username, and action taken.

30. Convert a string into an encoded version using ASCII manipulation and concatenation.