1. List Organizer

Description:
The user creates a list of 3 favorite hobbies. They then add a new hobby, remove one, and display the final sorted list.

Skills Applied:
List creation, list methods (append, remove, sort), and print formatting.

Example Output:

Enter three hobbies: reading, gaming, drawing

Enter one more hobby: coding

Which hobby do you want to remove? gaming

Your final list of hobbies:

['coding', 'drawing', 'reading']

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2. Tuple & Set Practice

Description:
Create a tuple with your birth day, month, and year. Then create a set of favorite colors, some repeated, and display the unique ones.

Skills Applied:
Tuple creation, indexing, set uniqueness, and basic printing.

Example Output:

Your birthdate tuple: (25, 6, 2003)

Enter favorite colors: blue, green, red, blue, red

Unique colors: {'green', 'blue', 'red'}

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3. Student Mark Lookup

Description:
Stores three student names with marks in a dictionary. The user enters a name, and the program displays their mark or a message if not found.

Skills Applied:
Dictionaries, key lookup, conditional checking.

Example Output:

Enter a student name to look up their mark: Zinhle

Zinhle scored 78%.

Enter a student name to look up their mark: Peter

Student not found.

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4. Even and Countdown Printer

Description:
Print all even numbers from 1 to 20 using a for loop. Then print a countdown from 5 to 1 using a while loop.

Skills Applied:
for loop, while loop, conditional logic, range usage.

Example Output:

Even numbers: 2 4 6 8 10 12 14 16 18 20

Countdown: 5 4 3 2 1

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5. Custom Greeting Function

Description:
Defines a function called greet_user(name) that prints a greeting. The user enters their name, and the function is called twice.

Skills Applied:
Function definition, parameters, and calling.

Example Output:

Enter your name: Conquerant

Hello, Conquerant!

Hello, Conquerant!

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6. Shopping Cart Manager

Description:
The user adds 3 items to a shopping cart (list). After all items are entered, the full cart is displayed in title case and in alphabetical order.

Skills Applied:
Lists, string methods, user input, and list sorting.

Example Output:

Enter item 1: bread

Enter item 2: milk

Enter item 3: eggs

Final cart:

['Bread', 'Eggs', 'Milk']

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7. Contact Book Search

Description:
A contact dictionary is created with names and phone numbers. The user enters a name, and the number is shown if found. If not, an error message is displayed using try-except.

Skills Applied:
Dictionaries, user input, exception handling, and formatted output.

Example Output:

Enter a name: Nomsa

Nomsa's number is: 0834567890

Enter a name: Dineo

Contact not found.

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8. BMI Classifier Function

Description:
The user enters their weight (kg) and height (m). A function calculates BMI and classifies it as Underweight, Normal, or Overweight.

Skills Applied:
Function definition, math operations, conditionals, formatted output.

Example Output:

Enter your weight (kg): 68

Enter your height (m): 1.65

Your BMI is 24.98 — Normal weight.

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9. Valid Integer Checker

Description:
The program repeatedly asks the user to enter a valid integer. It uses try-except to catch errors until the user enters a valid number. Then it prints the square of that number.

Skills Applied:
Loops, error handling, type casting, and math operations.

Example Output:

Enter a number: hello

That's not a number. Try again.

Enter a number: 4

Square of 4 is 16

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10. Student Report Generator

Description:
The user inputs 3 students and their marks. The program stores the data in a dictionary and then prints a clean report with their names and scores.

Skills Applied:
Dictionaries, loops, input handling, and formatted output.

Example Output:

Enter name and mark for 3 students:

Name: Lerato, Mark: 85

Name: Musa, Mark: 78

Name: Blessing, Mark: 92

--- Student Report ---

Lerato - 85%

Musa - 78%

Blessing - 92%