HW04 Prob. 1

- Design a programming problem and provide a reference solution.
  - The problem should be solvable with what we have taught till U04.
  - Avoid unnecessary use of features and functions not covered in U04.
- You will submit a program which contains the author name, problem description, required skills and functions, example IOs, and a reference solution.
  - Conform to the format specified in the following example.

```
### HW03 Prob. 1
# circle_area.py
# Author: Jiun-Lang Huang

### Problem description
# Write a program circle_area.py that asks
# the user to enter the radius and then prints
# the circle area. The area should be printed
# with 2 decimal digits.

### Skills and functions
# arithmetic expression, assignment,
# string formatting
# input(), float(), math.pi

### Example IO (cmd prompt: "EE3031 > ")
# EE3031 > python3 circle_area.py
# Enter the circle radius: 5
# The circle area is 78.54.
# EE3031 > python3 circle_area.py
# Enter the circle radius: 2.5
# The circle area is 19.63.

### Reference solution
import math
radius = float(input('Enter the circle radius: '))
area = math.pi * radius * radius
print('The circle area is %.2f.' % area)
```

Lines starting with ### are outlines. Don't modify them.

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Name the program and identify yourself.

Problem description with sufficient details.

List the involved skills and utilized functions.

Example IOs that cover possible cases.

Your reference solution.

HW04 Prob. 2

- ProblemSet_Decision: problem D01.

HW04 Prob. 3

- ProblemSet_Decision: problem D02.

Submission Guidelines

- Due: October 20, 2021 via NTU Cool
- Name your program as instructed in the problems.
- Pay attention to your programming style.
- **Avoid using Python features and functions not covered in lectures yet.**