

Exercise 6

Write a program using user defined exception class that will ask the user to enter a number until he guesses a stored number correctly. To help users figure out, provide a hint whether their guess is greater than or less than the stored number using user defined exceptions.

Code

```
class GuessException(Exception):
    def __init__(self, message):
        super().__init__(message)
stored_number = 42
while True:
    try:
        guess = int(input("Guess the number: "))
        if guess < stored_number:
            raise GuessException("\nThe number you guessed is smaller!")
        elif guess > stored_number:
            raise GuessException("\nThe number you guessed is larger!")
        else:
            print("\nYou have guessed the number correctly!")
            break
    except ValueError:
        print("\nInvalid input. Please enter a number.")
    except GuessException as exp:
        print(exp)
```

Output

Guess the number: 8	Guess the number: 45
The number you guessed is smaller! Guess the number: 20	The number you guessed is larger! Guess the number: 42
The number you guessed is smaller! Guess the number: 38	You have guessed the number correctly! Guess the number: a
The number you guessed is smaller! Guess the number: 42	Invalid input. Please enter a number. Guess the number: 42
You have guessed the number correctly!	You have guessed the number correctly!

Date of Submission	Signature of the Faculty
Remarks	