

Practice Assignment – 8

Programming with Python

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1 DURATION

2 Hours

2 PROBLEM STATEMENTS

2.1 Task 1: OOP Guess my number game

Design and code the "guess my number game" using Object Oriented Programming. Create a class called guessMyNumber and declare appropriate instance variables. Create the run function and other relevant functions for completing the class.

```
P1 = guessMyNumber("Ram")
```

```
P1.run()
```

Sample Run:

Computer chooses a number between 1 and 100

You will have 10 attempts to guess the correct number

-> 10

Incorrect. Guess Higher

-> 50

Incorrect. Guess Lower

-> 30

Incorrect. Guess Higher

-> 40

Incorrect. Guess Higher

-> 45

Correct. Congratulations!

Good playing!

2.2 Task 2: Stack

Implement the stack data structure using Object Oriented Programming in python. A sample class prototype is given below:

```
class stack(object):  
    def __init__(self, depth):  
        self.depth = depth  
    def push(self, item):  
        pass  
    def pop(self):  
        pass
```

Test the class with several test cases to check the integrity of the implementation.