

CSE412L - Artificial intelligence lab

Spring-2021

Lab evaluation 1

Time: 2 hours

1. Write a python program to create a function named *radians_to_degrees()* that takes an angle in radians as input and returns the corresponding angle in degrees rounded to one decimal place as output.

Sample Input:	Sample Output:
radians_to_degrees(1)	57.3
radians_to_degrees(20)	1145.9
radians_to_degrees(50)	2864.8

2. Write a python program that takes a number as input and checks if the parity of the sum of digits matches the parity of the number.

Sample Input:	Sample Output:
243	Sum:9, Parity: Odd, Result: True
12	Sum:3, Parity: Odd, Result: False
4	Sum:4, Parity: Even, Result: True

3. Write a python program to implement a basic rock-paper-scissor game as per the following rules:
 - rock beats scissor
 - scissor beats paper
 - paper beats rock

Sample Input:	Sample Output:
Enter your choice as rock, paper or scissor: Player 1: rock Player 2: paper	Player 2 wins!
Sample Input:	Sample Output:
Enter your choice as rock, paper or scissor: Player 1: rock Player 2: scissor	Player 1 wins!

Submission instructions:

1. Ready the following files.
183-15-XXXXXX-problem1.py
183-15-XXXXXX-output1.jpg
183-15-XXXXXX-problem2.py
183-15-XXXXXX-output2.jpg
183-15-XXXXXX-problem3.py
183-15-XXXXXX-output3.jpg
2. Then, save the files as a zip file with your student id as name. For example:
183-15-XXXXXX.zip