

CENG113
Programming Basics
HOMEWORK #1

DUE DATE: 11.11.2021 – 23:59

Q1. Write a Python code that takes a month from the user and prints the season of that month belongs.

i.e., input: July

output: July is in Summer.

Q2. Roman Numerals

Write a Python code that takes a **year** (i.e., 2020) from the user and print outs its conversion to Roman Numeral (i.e., MMXX) (**NOTE: cover only the years in the CE**). You should use **IF-ELSE** statements and given alphabet for numbers:

- I = 1
- V = 5
- X = 10
- L = 50
- C = 100
- D = 500
- M = 1000

HINT: Don't forget to check general rules for constructing Roman numerals.

Q3. Bunco Game

Write a Python code that plays the Bunco Game for one player **using only the topics covered so far** (without using **LOOPS**). The rules of the Bunco Game are:

1. Player has six rounds to roll the three dice (Round 1, Round 2, etc.). The round ends if the player fails the score in that round.
2. There are three types of scores in the game.
 - a. Bunco: If all the three dice match with the round number being played player has rolled a "Bunco" and got 21 points (For example: Round 1, Roll 1, all 3 dice [1, 1, 1] make a "Bunco" and 21 points.).
 - b. Mini-Bunco: If all the three dice match but don't match with the round number then player has rolled a "Mini-Bunco" and got 5 points (For example: Round 1, Roll 1, all 3 dice [5, 5, 5] make a "Mini-Bunco" and 5 points.).

- c. If any of the rolled dice match the number of the round player got 1 point for each matching dice (For example: Round 2, Roll 3, dice [3, 2, 2] player got 1+1=2 points).
- d. If the player doesn't score any points in a roll that round ends and starts to roll for next round.

Steps of the code:

1. You can roll the dice with:

```
import random  
dice1 = random.randint(1,6)
```
2. You should print out which round and roll are the game in and rolled dice for each roll.
3. You should print out gained points in that round and total points.
4. Your program should cheer for "BUNCO!!" or "Mini-BUNCO!" when the player rolled them.
5. At the end of the program, print out total points, "BUNCO" count and "Mini-BUNCO" count.

SUBMISSION RULES:

Groups who do **NOT FOLLOW THESE RULES WILL BE GRADED AS 0.**

1. You should submit your codes through **Microsoft Teams**.
2. One submission per group is expected. Do not submit two times as a group.
3. Your homework should have **three python files** and should be named as **HW1_Q1_GroupID.py**, **HW1_Q2_GroupID.py** and, **HW1_Q3_GroupID.py**. Submit them as a **ZIP file** as **HW1_GroupID.zip**.
4. Use comments in your code to explain important parts, otherwise you will **lose** some points.
5. Write your **student IDs – Name & Surnames** as comments at the beginning of your code.