##Q1 A

##Part 1

import random

def roll\_die():

return random.randint(1, 8)

high\_scores = 0

rolls = [roll\_die() for \_ in range(10)]

high\_scores = sum(1 for roll in rolls if roll > 4)

print(f"The number of high scores is {high\_scores}")

##Part 2

total\_sum = 0

roll\_count = 0

while total\_sum <= 100:

total\_sum += roll\_die()

roll\_count += 1

print(f"The number of rolls to exceed a sum of 100 is {roll\_count}")

##1B

##Part 1

full\_name = input("Enter your name (first name last name): ")

##Part 2

full\_name = full\_name.upper()

first\_name, last\_name = full\_name.split()

modified\_name = first\_name[-1] + first\_name[1:-1] + first\_name[0] + last\_name[-1] + last\_name[1:-1] + last\_name[0]

print(modified\_name)

## 1 C Part 1

word = input("Enter a word: ").lower()

## Part 2 - 4

if len(word) > 6:

modified\_word = ""

for letter in word[::-1]:

if letter == 'e':

modified\_word += 'x'

else:

modified\_word += letter

print(f"Modified word: {modified\_word}")

elif len(word) < 6:

modified\_word = ""

for letter in word:

if letter == 'e':

modified\_word += 'ee'

else:

modified\_word += letter

print(f"Modified word: {modified\_word}")

else:

print("Word is accepted")

## 1 D

## Part 1

teams = ["Hungary", "Germany", "Slovakia", "North Macedonia", "Netherlands", "Spain", "England", "Portugal"]

## Part 2

letters = [len(team.replace(" ", "")) for team in teams]

## Part 3

largest = second\_largest = -1

for count in letters:

if count > largest:

second\_largest = largest

largest = count

elif count > second\_largest and count != largest:

second\_largest = count

print(f"The largest number of letters is {largest}")

print(f"The second largest number of letters is {second\_largest}")

## Q 2

## part A

match\_times = [

[38, 27, 150, 77, 150, 20],

[150, 88, 150, 55, 150, 67],

[150, 15, 41, 150, 55, 113],

[37, 150, 37, 150, 33, 150],

[45, 26, 39, 62, 93, 12],

[150, 49, 116, 107, 118, 150],

[150, 150, 150, 17, 150, 99]

]

team\_names = ["Andorra", "Belize", "Chile", "Djibouti", "Eswatini", "Fiji", "Georgia"]

match\_numbers = [1, 2, 3, 4, 5, 6]

## Part B

from tabulate import tabulate

headers = ["Countries"] + [f"Match {i}" for i in match\_numbers]

table = [ [team\_names[i]] + match\_times[i] for i in range(len(team\_names))]

print("Table A")

print(tabulate(table, headers, tablefmt="grid"))

## Part C

sum\_times = [sum(times) for times in match\_times]

print("Sum of times for each team:", sum\_times)

## Part D

failed\_to\_score = [times.count(150) for times in match\_times]

print("Number of times each team failed to score:", failed\_to\_score)

## Part E

match\_times = [

[38, 27, 150, 77, 150, 20],

[150, 88, 150, 55, 150, 67],

[150, 15, 41, 150, 55, 113],

[37, 150, 37, 150, 33, 150],

[45, 26, 39, 62, 93, 12],

[150, 49, 116, 107, 118, 150],

[150, 150, 150, 17, 150, 99]

]

team\_names = ["Andorra", "Belize", "Chile", "Djibouti", "Eswatini", "Fiji", "Georgia"]

fail\_to\_score\_counts = [scores.count(150) for scores in match\_times]

for team, count in zip(team\_names, fail\_to\_score\_counts):

print(f"{team} failed to score {count} times.")

## Part F

def fastest\_goal(team\_name):

if team\_name not in team\_names:

return f"{team\_name} not in Competition."

index = team\_names.index(team\_name)

team\_times = match\_times[index]

if all(time == 150 for time in team\_times):

return f"{team\_name} did not score in any match."

fastest\_time = min(time for time in team\_times if time != 150)

match\_number = team\_times.index(fastest\_time) + 1

return match\_number

print(fastest\_goal("Andorra"))

print(fastest\_goal("Belize"))

print(fastest\_goal("Chile"))

print(fastest\_goal("Djibouti"))

print(fastest\_goal("Eswatini"))

print(fastest\_goal("Fiji"))

print(fastest\_goal("Georgia"))

print(fastest\_goal("Faroe Islands"))