*#Exercise 1*

*#What is 5 to the power of 5?*

print('5^5 =',5\*\*5)

*#Exercise 2*

*#What is the remainder from dividing 73 by 6?*

print('rest =',76%6)

*#Exercise 3*

*#How many times does the whole number 3 go into 123? What is the remainder of dividing 123 by 3?*

print('hvor mange gange det går op =',123//3)

print('rest =', 123%3)

*#Exercise 4*

*#Split the following string into a list by splitting on the space character:*

s = 'MDS is going virtual!'

print(s.split())

*#Exercise 5*

*#Given the following variables:*

thing = "light"

speed = 299792458  *# m/s*

l1 = f'The speed of {thing} is {speed:e} m/s'

print(l1)

*#Exercise 6*

*#Given this nested list, use indexing to grab the word “MDS”:*

l2 = [10, [3, 4], [5, [100, 200, ["MDS"]], 23, 11], 1, 7]

print(l2[2][1][2])

*#Exercise 7*

*#Given this nest dictionary grab the word “MDS”:*

d = {

    "outer": [

        1,

        2,

        3,

        {"inner": ["this", "is", "inception", {"inner\_inner": [1, 2, 3, "MDS"]}]},

    ]

}

print(d["outer"][3]["inner"][3]["inner\_inner"][3])

*#Exercise 8*

*#Why does the following cell return an error?*

*#t = (1, 2, 3, 4, 5)*

*#t[-1] = 6*

print('nej fordi TUBLE!!! Imutable NONO CHANGE!')

*#Exercise 9*

*#Use string methods to extract the website domain from an email, e.g., from the string "tomas.beuzen@fakemail.com", you should extract "fakemail".*

email = "tomas.beuzen@fakemail.com"

print(email.split('@')[1].split('.')[0])

*#Exercise 10*

*#Given the variable language which contains a string, use if/elif/else to write a program that:*

language = "python"

def kk(language):

    if language.lower() == "python":

        return "I love snakes!"

    elif language.lower() == "r":

        return "Are you a pirate?"

    else:

        return f"What is {language}?"

print(kk("R"))