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**San Francisco Bay University**

**Python Programming**

**Quiz #1**

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1. Define a function in recursion to check if there is a digitwith value *7* in positive number argument or not.

***def*** *has\_seven(k):*

*"""Returns True if at least one of the digits of k is a 7, False otherwise.*

*>>> has\_seven(3)*

*False*

*>>> has\_seven(7)*

*True*

*>>> has\_seven(2734)*

*True*

*>>> has\_seven(2634)*

*False*

*>>> has\_seven(734)*

*True*

*>>> has\_seven(7777)*

*True*

*"""*

**Answer:**

def has\_seven(k):

    if k <= 0:

        raise ValueError("Number needs to be positive.")

    if k % 10 == 7:

        return True

    elif k < 10:

        return False

    else:

        return has\_seven(k // 10)

num = int(input("Enter a positive number: "))

try:

    if has\_seven(num):

        print("True")

    else:

        print("False")

except ValueError as ERROR:

    print("Error:", str(ERROR))