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CE450

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QUIZ#1

GitHub link: <https://github.com/MynameisKoi/CE450/blob/main/quiz%231.py>

Source code:

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

# check if a number k has the target digit by recursion

if *k* == 0:

return False

elif *k* % 10 == *target*:

return True

else:

return has\_seven(*k* // 10, *target*)

print("has\_seven(3,7): ", has\_seven(3,7))

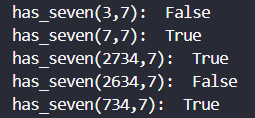
print("has\_seven(7,7): ", has\_seven(7,7))

print("has\_seven(2734,7): ", has\_seven(2734,7))

print("has\_seven(2634,7): ", has\_seven(2634,7))

print("has\_seven(734,7): ", has\_seven(734,7))

Run program & result:



In a general format, we have the general function as below:

def has\_digit(*k*, *target*):

# check if a number k has the target digit by recursion

if *k* == 0:

return False

elif *k* % 10 == *target*:

return True

else:

return has\_digit(*k* // 10, *target*)

# check for a number k has digit 7

print("has\_digit(7,7): ", has\_digit(7,7))

print("has\_digit(2734,7): ", has\_digit(2734,7))

print("has\_digit(2634,7): ", has\_digit(2634,7))

print(" ")

# check for a number k has digit 2

print("has\_digit(2734,2): ", has\_digit(2734,2))

print("has\_digit(2634,2): ", has\_digit(2634,2))

print("has\_digit(734,2): ", has\_digit(734,2))

Run program & result:

