CODE FOR THE GIVEN ASSIGNMENT.

def min\_diff(arr, n, m, d1):

names = list(d1.keys())

myl = []

myl1 = []

if m == 0 or n == 0:

return 0

arr.sort()

if n < m:

return -1

md = arr[n - 1] - arr[0]

for i in range(len(arr) - m + 1):

md = min(md, arr[i + m - 1] - arr[i])

if arr[i + m - 1] - arr[i] == md:

myl.append(arr[i + m - 1])

myl1.append(arr[i])

i1 = arr.index(myl[1])

i2 = arr.index(myl1[1])

print("Here the goodies that are selected for distribution are:")

for v in names[i2:i1+1]:

print (v)

return md

dict1 = {"mi band : 999": 999, "sandwich toaster : 2195": 2195, "cult pass : 2799": 2799, "scale : 4999": 4999, "fitbit : 7980": 7980,

"microwave : 9800": 9800, "alexa : 9999": 9999, "dig cam : 11101": 11101, "ipod : 22349": 22349, "macbook : 229900": 229900}

arr = list(dict1.values())

m = int(input("Number of employees: "))

n = len(arr)

print("And the difference between the chosen goodie with highest price and the lowest price is ", min\_diff(arr, n, m, dict1))

OUTPUT FOR THE ABOVE CODE

RUN1:

Number of employees: 6

Here the goodies that are selected for distribution are:

sandwich toaster : 2195

cult pass : 2799

scale : 4999

fitbit : 7980

microwave : 9800

alexa : 9999

And the difference between the chosen goodie with highest price and the lowest price is 7804

RUN 2:

Number of employees: 4

Here the goodies that are selected for distribution are:

fitbit : 7980

microwave : 9800

alexa : 9999

dig cam : 11101

And the difference between the chosen goodie with highest price and the lowest price is 3121

RUN3:

Number of employees: 5

Here the goodies that are selected for distribution are:

scale : 4999

fitbit : 7980

microwave : 9800

alexa : 9999

dig cam : 11101

And the difference between the chosen goodie with highest price and the lowest price is 6102

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