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**Assignment No: 05**

**Roll NO** : 21109

**Class:** SE ( AI & DS )

**Subject** : Software Laboratory I (Artifical Intelligence)

**Problem statement :**

Implement Greedy search algorithm for any of the following application:

• Selection Sort

• Minimum Spanning Tree

• Single-Source Shortest Path Problem

• Job Scheduling Problem

• Prim's Minimal Spanning Tree Algorithm

• Kruskal's Minimal Spanning Tree Algorithm

• Dijkstra's Minimal Spanning Tree Algorithm

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**PROGRAM /CODE :**

def findMin(V):

# All denominations of Indian Currency

deno = [1, 2, 5, 10, 20, 50,

100, 500, 1000]

n = len(deno)

# Initialize Result

ans = []

# Traverse through all denomination

i = n - 1

while(i >= 0):

# Find denominations

while (V >= deno[i]):

V -= deno[i]

ans.append(deno[i])

i -= 1

# Print result

for i in range(len(ans)):

print(ans[i], end = " ")

# Driver Code

if \_\_name\_\_ == '\_\_main\_\_':

n = int(input("Enter the amount: "))

print("Following is minimal number",

"of change for", n, ": ", end = "")

findMin(n)

**OUTPUT :**

