def potential(n):

size = 1

total = 0

dcost = 0

icost = 0

bank = 0

phi = 0

ci = 0

phi\_prev = 0

print("Elements\tDoubling Copying Cost\tInsertion Cost\tTotal Cost\t\tBank\t\tSize\t\tPhi\t\tCi")

for i in range(1, n + 1):

icost = 1

if i > size:

size \*= 2

dcost = i - 1

total = icost + dcost

phi = 2 \* i - size

ci = total + phi - phi\_prev

bank += (3 - total)

print(i, "\t\t\t\t", dcost, "\t\t", icost, "\t", total, "\t\t\t", bank, "\t\t", size, "\t\t", phi, "\t\t", ci)

icost = 0

dcost = 0

phi\_prev = phi

potential(10)

Output :

