

```

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\t", total, "\t\t\t\t", bank, "\t\t\t", size, "\t\t\t", phi, "\t\t\t", ci)

        icost = 0

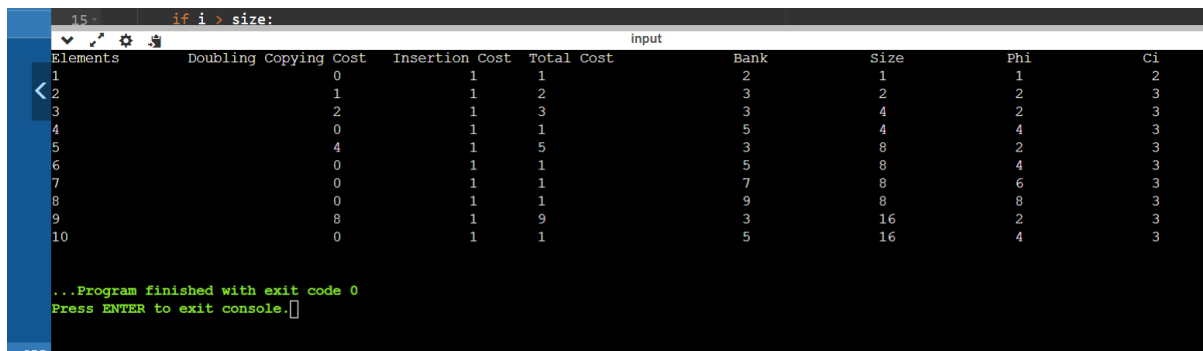
        dcost = 0

        phi_prev = phi

    potential(10)

```

Output :



Elements	Doubling Copying Cost	Insertion Cost	Total Cost	Bank	Size	Phi	Ci
1	0	1	1	2	1	1	2
2	1	1	2	3	2	2	3
3	2	1	3	3	4	2	3
4	0	1	1	5	4	4	3
5	4	1	5	3	8	2	3
6	0	1	1	5	8	4	3
7	0	1	1	7	8	6	3
8	0	1	1	9	8	8	3
9	8	1	9	3	16	2	3
10	0	1	1	5	16	4	3

...Program finished with exit code 0
Press ENTER to exit console.