Name : Shraddha Rajkumar Kotwar
Roll No.: 14

ASSIGNMENT NO : 4

Write a program to solve a 0-1 Knapsack problem using dynamic programming or branch and bound strategy.

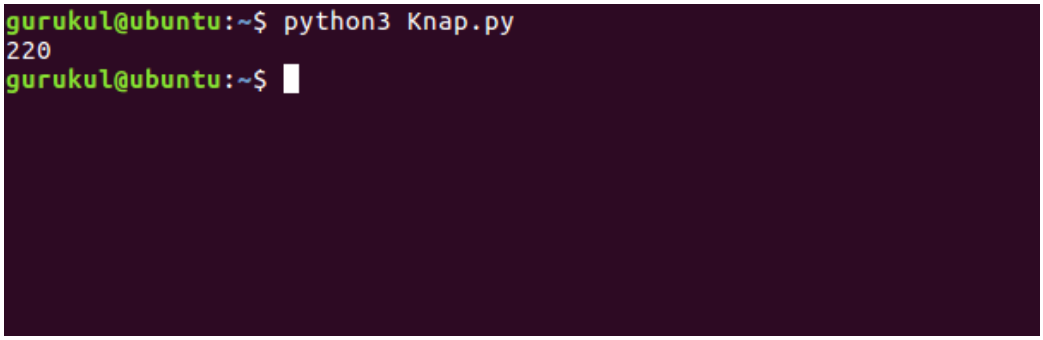
```
def knapSack(W, wt, val, n):

    if n == 0 or W == 0:
    return 0

    if (wt[n-1] > W):
    return knapSack(W, wt, val, n-1)

    else:
    return max(
    val[n-1] + knapSack(
        W-wt[n-1], wt, val, n-1),
    knapSack(W, wt, val, n-1))


if __name__ == '__main__':
    profit = [60, 100, 120]
    weight = [10, 20, 30]
    W = 50
    n = len(profit)
    print(knapSack(W, weight, profit, n))
```


gurukul@ubuntu:~$ python3 Knap.py
220
gurukul@ubuntu:~$