

Assignment 4 :

Source Code :

```
def knapSack(W, wt, val, n):  
    # initial conditions  
    if n == 0 or W == 0 :  
        return 0  
  
    # If weight is higher than capacity then it is not included  
    if (wt[n-1] > W):  
        return knapSack(W, wt, val, n-1)  
  
    # return either nth item being included or not  
    else:  
        return max(val[n-1] + knapSack(W-wt[n-1], wt, val, n-1),  
                    knapSack(W, wt, val, n-1))  
  
    # To test above function  
val = [60, 100, 120]  
wt = [10, 20, 30]  
W = 50  
n = len(val)  
  
print(knapSack(W=W,wt=wt,val=val,n=n))
```

Output :

220