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In [ ]: # Name: Sushil Suresh Kannake
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        # SUB: DAA
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In [1]: def fractional_knapsack():
        weights = [10, 20, 30]
        values = [60, 100, 120]
        capacity = 50
        res = 0
        # Pair : [Weight, value]
        for pair in sorted(zip(weights, values), key=lambda x: x[1] / x[0], reverse=True):
            if capacity <= 0: # Capacity completed - Bag fully filled
                break
            if pair[0] > capacity: # Current's weight with the highest value/weight
                res += int(capacity * (pair[1] / pair[0])) # Completely fill the bag
                capacity = 0
            elif pair[0] <= capacity: # Take the whole object
                res += pair[1]
                capacity -= pair[0]
        print(res)

        if __name__ == "__main__":
            fractional_knapsack()
```

```
60
160
240
```

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In [ ]:
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