```
def knapsack_01(weights, values, capacity):
  n = len(weights)
  dp = \hbox{\tt [[0 for\_in range(capacity+1)] for\_in range(n+1)]}
  for i in range(1, n + 1):
    for w in range(1, capacity + 1):
      if weights[i - 1] <= w:
        dp[i][w] = max(values[i - 1] + dp[i - 1][w - weights[i - 1]], dp[i - 1][w])
         dp[i][w] = dp[i - 1][w]
  return dp[n][capacity]
def get_items_from_user():
  n = int(input("Enter the number of items: "))
  weights = []
  values = []
  for i in range(n):
    print(f"\nEnter details for Item \{i+1\}:")
    weight = int(input("Weight: "))
    value = int(input("Value: "))
    weights.append(weight)
    values.append(value)
  return weights, values
if __name__ == "__main__":
  weights, values = get_items_from_user()
  capacity = int(input("\nEnter the capacity of the knapsack: "))
  max_value = knapsack_01(weights, values, capacity)
  print(f"\nMaximum\ value\ in\ the\ knapsack: \{max\_value\}")
```