CS 312: Algorithm Analysis

Homework Assignment #14

Show all work neatly.

Question 1: (5) Problem 6.1 from the text

Question 2: (5) Knapsack with repetition
Use dynamic programming to fill a knapsack <u>with</u> repetition having a maximum weight
capacity of 10 units with a load of maximum value from the following set of objects:

Object	Weight	Value
A	1	1
B	2	7
C	5	11
D	6	21
E	7	31

Your answer should include:
- a table with solutions to sub-problems
- the value of the optimal load
- the objects to be included in the optimal load (show back-pointers in the table)