0/1 KNAPSACK

```
Algorithm Knapsack(N, P, wt, cap)
{
      for w := 0 to cap do
            v[0, w] := 0;
      for i := 1 to N do
      {
            v[i, 0] := 0;
            for w := 1 to cap do
            {
                  if(wt[i] > w) then
                        v[i, w] := v[i-1, w];
                  else

                  v[i, w] := max(v[i-1, w], (P[i] + v[i-1, w-wt[i]]));
            }
      }
      return(v[N, cap]);
}
```