```
0
  Knapsack :
 # include <stdio. h>
                        for Civil 12 11 1 12 10 El mox profit >0; 1-
 # defane N4
 He observed 1 = dp CI-I) ( generaling Copy (TEJAPA) only #
 Street Item { "of (b) : Ffort, b. t. tolgood) bot most ") foiled
    i, idens (i-1) weight items (i-1) people; thejow this
       int purofit;
                      masc Profit a -= items (1-1). profit;
   3:
 ind mase (int a, int b); thereough = - phisosopp principality
      noturn (a>b) ? a:b;
  3
void Knapsack Churt Item ikury [], int n, int Capacity.) [
      int dp[n+1] (capacity +1];
  for (wi= 0; i <= n; i++) {
      for (it w =0; w < = coparty; w++) {
          15.9) (0==0110==1) di
             dp (1) [w] = 0;
        else if Citaus (1-1]. weight <= w)
            dp [i] (w) = max (items [i-1]. profit + dp [i-1] [w- itams
                       (i-1]. weight], dp (i-i) [w]);
            else
               dp(i) (w) = dp(i-1)(w);
                     Items helicoled: Item 4 ( Value: 15, we ght: 3)
```

```
int remaining Capacity = Capacity;
heirt ("Items selected: \n");
for Civit i=n; i> 10 EE mox profet >0; 1--) {
     if (mox Profit ! = dp C1-1) [ sumaling Capacity ]) {
        print (" Item of d ( weight: 1.d, peofit: 1.d) \n", 3
              i, items (i-1). weight, items (i-1). profit);
       masc Profit = = items (i-1). profit;
       gunnowing Capacity -= items (i-1). weight;
    3
                                      section (asb) ? a:b;
   3
       Struct Item items (N) = {
int male () {
                          {3,59,
                        } [4:8]; glumpes = > 00 ; 000 to) to
                         25,93, (0==0110==1) di
                        else of CHOW (1-1). weight <= w)
        -03[100] = max (flows 01-9, page 18p (01)]
                          12 12
                         22/0 22 Mys (1-1)
                         30 32
                         30 37 - Dap = (01) 1296
   More valu = 37
   Items Ireland: Item 4 (valu: 15, weight: 2)
                Ifun 2 ( value: 10, weight: 1)
                Itun ( value: 12, weigh: 2)
```

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2 ( Ferences
  #include cstdio.h) and [DISCHM, XAM -THI = [1] gold
  # include <Still b. h>
 # include < linits. h>
# define V 5
                      (it land = 0; wood < V - 1; loud ++)
int minkey (int key (), bool med set ()
    int men = INT-MAX, min-index; suit = [00] Too tem
 2
    for (ind v = 0; v = V; v++) (++v ( V > v ; 0 = v +v) rd
        if (mst Set (v) == false el key (v) < min)
         min = key (U), min-index=Vi
     guturn min-indesc;
               harast (v) 20, ky (v)= graph (v)[v]
3
void point MST (int horent (], int graph [V] [V])
    printf (" Edge It weight In");
      for Civt i=1; i < U; 1++) ] ( ) }
          post ("1d - 1.d. (t 1.d \n", parent Ci], i, graph Ci]
  3
    pointMST Cint graph (UJ[U])
   int point (V);
                          (0,5,7,9,0)
   int key (U);
   bool mst Set [V];
```

```
for Civ 1=0; 1 < V) 1++)
   Key Ci] = INT_MAX, mstSetCi] = false; dollars dollars &
  Key (0) 20)
   parent (0) = -1;
 for Cirt Count = 0; count < V-1; Count ++) {
     int u= min key (key, mostset);
     mst Set Co] = true; woodi = nim , XAM = TUI = muy by
    for (int v=0; UCV; V++) (++V (V >V =0 = V bi) bo)
       if (graph (u) (v) ff msf Set (v)=2 false
         graph (U) (V) (Key (U)) mhm (U) put = nim
         harent (V) = V, Key (V) = graph (U) [U];
                    wild forest MST (int parent (), int graph [V] (V)
int matr ()
                           wintf("Edge It weight In");
2
   int graph (V] (V) = {
                 {0,2;0,6,6+3; (U>); (=) ti) rod
   10 hors 1, 10 kmg 1, 11 bit 3
               20,3,0,0,73,
      word for Mest Cold graph (VICVI) & p. 0, 0, 8, 6 ? P. Montel bio
               {0,5,7,9,03
   from MST (graph);
  seturo;
```

-) Outstyr
Edge Wight

3 1-2

0-3

1-4