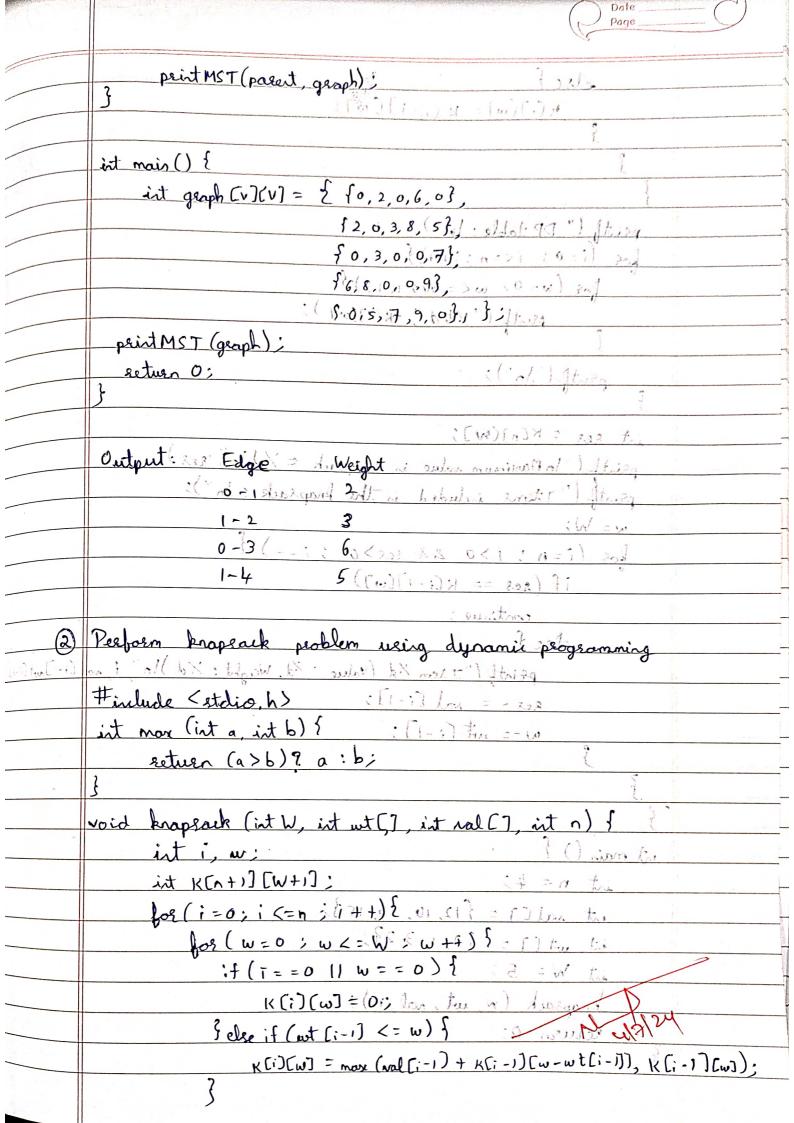
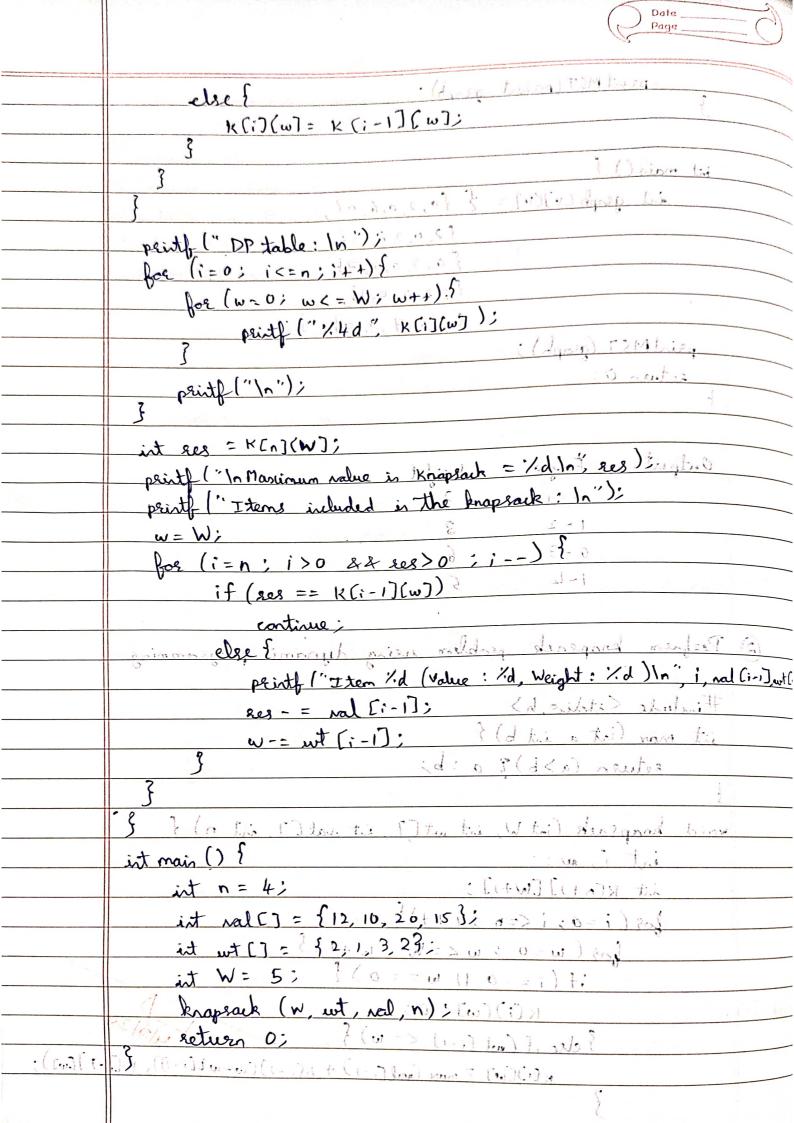
Lab - 9

@ Perform Angrock problem vering dynamic programing Peaform the prim's algorithm, Hischarda Soldio. h > 101 1 10 1017 Hirelucle < stellool . h> Wirelande < limits. h> 1 gar mil Holpine V 5 Male Marian agre int minkey (int key [? book metset [)) for shadesoul by all int min = INT_MAX, min - indox: for (int v=0; v<V; v++) if (motset[v] = = false & f key [v] < min) min = key [V], min_index = V: . Trighto o to reduce minimaline; and munda without grown that void print MST (it parent (7 int graph CV) (Y) } printf (" Edge It weight In"); 2 8 0 d for (int i=1; i < V; i++) (0) = printf (" xd - xd 1 t xd no, potent [i], i, graph [i][parent [i]]; void pain MST (int graph (v)(v)) } int procent (V); int key [V]: bool metSet [v] for (int i=0; i<V; i++) key [i] = INT_MAX, metset [i] = false; key [o] = 0; parent Co] = -1; for (int count = 0; count < V-1; count ++) } int u = minkey (key, netset); metSet [u] = teue; for (int v=0; v < V; v++) if (graph CuJ(v) & & metSet(v) == false && graph CuJ(v) < ky) parent[v7 = u key [v] = graph [u][v];





Ordo	ut:
-	Maria Contractor

DP Table:

0 0 0 0 0 0

00 12 12 12 12

0 10 12 22 12 22

0 10 12 22 30 32

0 10 15 25 30 37

Maximum value in kneptock = 37

Items included in the knapsack:

Item 4 (Value: 15, weight: 2)

Item 2 (Value: 10, weight: 1)

Item 1 (Value: 12, Weight: 2)