Program 3 S.R. PUNEETH
IBMI8CS087 47 SBUNFORTH 18CS087 class Disjoint novets me the the There 7/10/20 wester ( int > week , parent ; i x = [x ] trenog fi int n; return x; public! Desjoint Union Sets (int n) setura jourt [2] = first auch ( jourt ! walk rusige (n); parent. resige (n); I dri ( dri ) derrain biser ethis -> n = n; make set () world make Set () for (aut i=0; ixn; i++) parent [i] = i; int & fend ( wit >1) if (parent [x]!=x) seturn find (parent [x]); auturn >1 world Union (int x, inty) int shoot = ifind (x); with y Rest = find (y); if (xRoot = = yRoot) acturn;

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inf (rank [reRoot] < rank [yRoot])
     Parent [rRoot]: yRoot;
 else if ( aank [groot] < aank [rRoot])
parent (groot] = rRoot;
    pourt [yRoot] = >cRoot;
    rank [xRost] = wank x [Rost] + 1;
3
```