**Program No. :**

**Aim : Write a Program for sorting an array using Quick Sort.**

domains

ILIST=INTEGER\*

predicates

quicksort(ILIST,ILIST)

split(integer,ILIST,ILIST,ILIST)

concat1(ILIST,ILIST,ILIST)

clauses

quicksort([],[]).

quicksort([X|T],S):-

split(X,T,L1,L2),

quicksort(L1,S1),

quicksort(L2,S2),

concat1(S1,[X|S2],S).

split(X,[Y|T1],[Y|LESS],GREAT):-

X>Y,

split(X,T1,LESS,GREAT).

split(X,[Y|T1],LESS,[Y|GREAT]):-

X<Y,

split(X,T1,LESS,GREAT).

split(X,[],[],[]).

concat1([X1|T4],S3,[X1|S4]):-

concat1(T4,S3,S4).

concat1([],L,L).

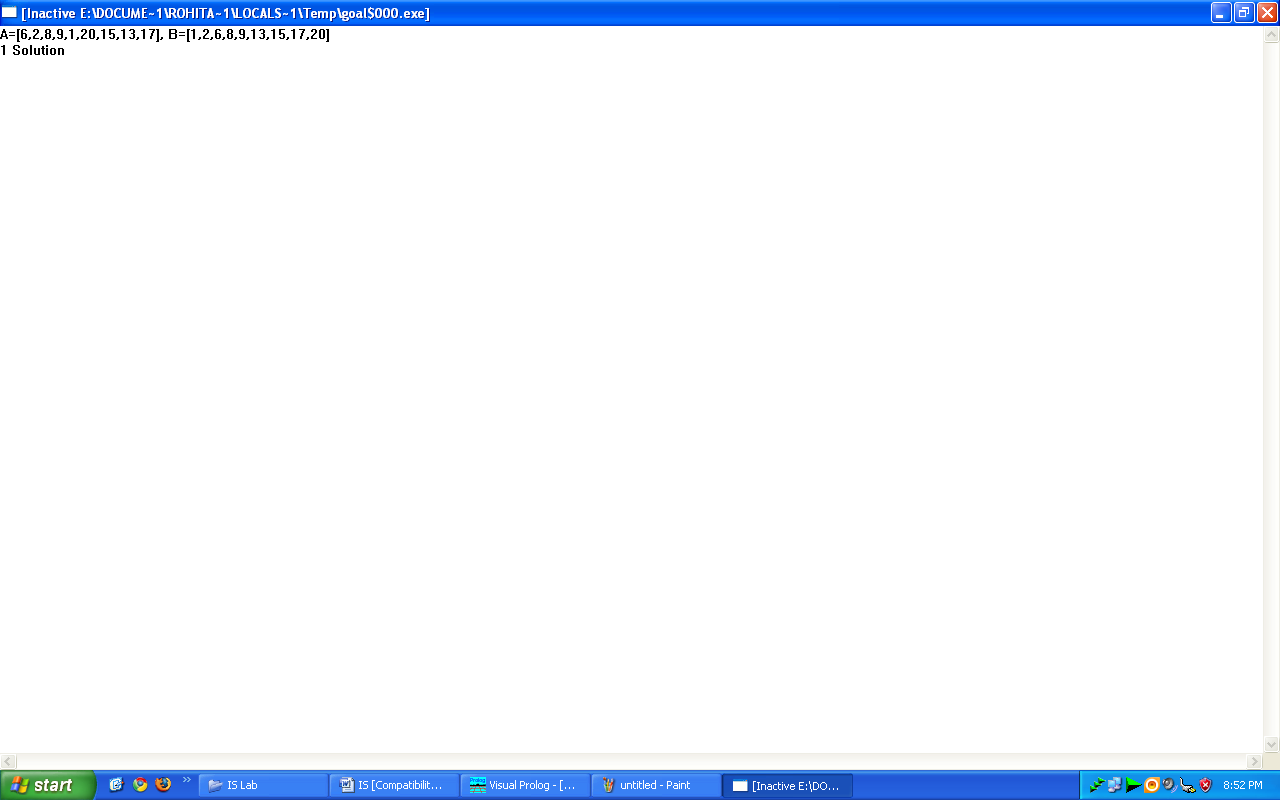
goal

A=[6,2,8,9,1,20,15,13,17],

quicksort(A,B).

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**OUTPUT**