**Practical No : - 3**

**Aim :Write a program to implement basic fuzzy set Operation using fuzzy header file.**

**Code :**

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

#include"JAY.H"

void main()

{

inti,j,k,ch;

float a[5]={1.0,0.9,0.5,0.8,1.0},b[5]={0.2,0.4,0.9,0.6,0.1},p,r,ans,temp;

clrscr();

for(i=0;i<=4;i++)

{

printf("%f",a[i]);

printf("\t%f",b[i]);

printf("\n");

}

printf("1.Union 2.Intersection 3.Complement ");

printf("Enter the value:");

scanf("%d",&ch);

printf("\n\n");

switch(ch)

{

case 1:

{

for(i=0;i<=4;i++) {

p=a[i];

r=b[i];

ans=uni(p,r);

printf("\n %f",ans);

printf("\t");

} break;

}

case 2:

{ for(i=0;i<=4;i++) {

p=a[i];

r=b[i];

ans=inter(p,r);

printf("\n %f",ans);

printf("\t");

} break;

}

case 3:

{ for(i=0;i<=4;i++) {

p=a[i];

r=b[i];

ans=comple(p);

temp=comple(r);

printf("\n %f",ans);

printf("\n %f",temp);

printf("\t ");

} break;

}

}

getch();

}

**Header File :**

floatuni(float p,float q)

{

if(p>=q)

{

printf("\nunion of p & q:",&p);

return p;

}else

{

printf("\n union of p & q :",&q);

return q;

}

}

float inter(float w,float x)

{

if(w<=x)

{

printf("\nintersection of w & x :",&w);

return w;

} else {

printf("\nintersection of w &x",&x);

return x;

}

}

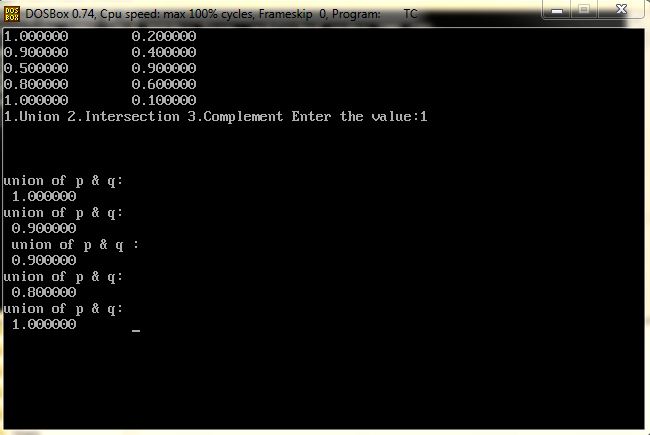
floatcomple(float e) {

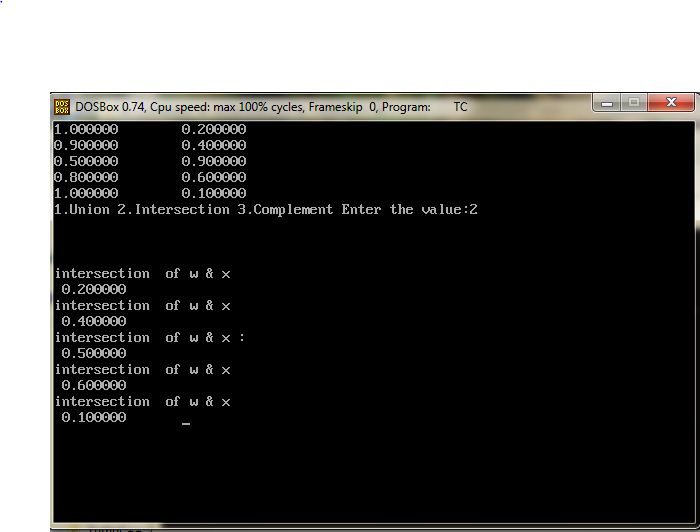
floatans;

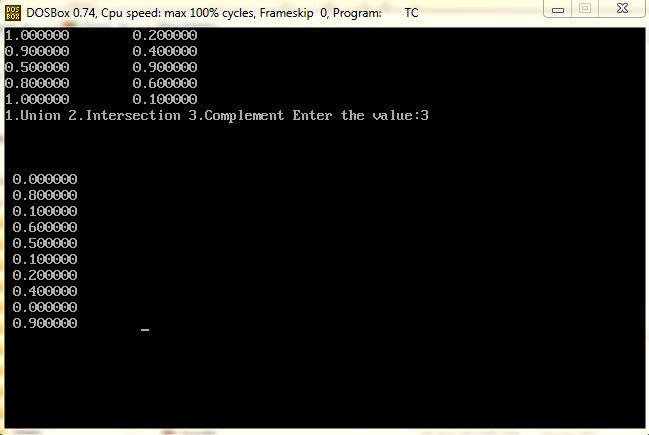
ans=(1.0-e);

returnans;

}

**Output: **

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