EXPERIMENT 1

SOURCE CODE:

Copy:

```
#include<stdio.h>
#include<conio.h>
void main()
{
      int i,j,r;
      FILE *f1, *f2;
      f1=fopen("Image1.bmp","rb+");
      f2=fopen("image2.bmp", "wb+");
      for(i=0;i<1078;i++)
      j=fgetc(f1);
      fputc(j,f2);
      while(!feof(f1))
            r=qetc(f1);
            fputc(r, f2);
      fclose(f1);
      fclose(f2);
      getch();
}
Negation:
#include<stdio.h>
#include<conio.h>
void main()
      int i,j,r;
      FILE *f1, *f2;
      f1=fopen("Image1.bmp", "rb+");
      f2=fopen("image2.bmp","wb+");
      for(i=0;i<1078;i++)
      {
      j=fgetc(f1);
      fputc(j,f2);
      }
      while(!feof(f1))
            r=255-getc(f1);
```

```
fputc(r,f2);
      }
      fclose(f1);
      fclose(f2);
      getch();
}
Threshold:
#include<stdio.h>
#include<conio.h>
void main()
      int i,j,r;
      FILE *f1, *f2;
      f1=fopen("Image1.bmp","rb+");
      f2=fopen("image2.bmp","wb+");
      for(i=0;i<1078;i++)
      j=fgetc(f1);
      fputc(j,f2);
      while(!feof(f1))
            r=getc(f1);
if(r>150){
            fputc(255, f2);
      }else{
            fputc(0,f2);
}
}
      fclose(f1);
      fclose(f2);
      getch();
}
Double Threshold:
#include<stdio.h>
#include<conio.h>
void main()
      int i,j,r;
      FILE *f1, *f2;
      f1=fopen("Image1.bmp","rb+");
      f2=fopen("image2.bmp","wb+");
      for(i=0;i<1078;i++)
```

```
j=fgetc(f1);
      fputc(j, f2);
      while(!feof(f1))
            r=getc(f1);
if(r>100 && r<200){
            fputc(255, f2);
      }else{
            fputc(0,f2);
}
}
      fclose(f1);
      fclose(f2);
      getch();
}
Contrast Stretching:
#include <stdio.h>
#include <conio.h>
#include<math.h>
void main()
   FILE *in, *out;
   int i,j,k,m4,x1,x2,y1,y2;
   double m, m1, m2, m3;
   clrscr();
   in = fopen("C:/Users/sakec/Desktop/flo.BMP", "rb+");
   out = fopen("C:/Users/sakec/Desktop/contrast.BMP", "wb+");
   printf("Enter the value of a and b");
   scanf("%d%d",&x1,&y1);
   printf("Enter the value of s1 and s2");
   scanf("%d%d", &x2, &y2);
   m1=(y1-0)/(x1-0);
   m2 = (y2-y1) / (x2-x1);
   m3 = (255 - y2) / (255 - x2);
   for(i=0;i<1078;i++)
      j=fgetc(in);
     fputc(j,out);
   while (!feof(in))
      k=fgetc(in);
```

```
if(k \le x1 \& k \ge 0)
     {
          m=m1*k;
     else if(k \le y2 \&\& k \ge x1)
     m=m2*(k-x1)+x2;
     }
     else
      m=m3*(k-y1)+y2;
     }
     m4=floor(m);
     fputc(m4, out);
   }
  fclose(in);
  fclose(out);
  printf("success");
  getch();
}
```

OUTPUT:
ORIGINAL IMAGE:



COPY IMAGE:

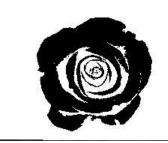


Threshold between 100 and 200:





THRESHOLD: th= 150:



Contrast : values(170 180 200 210)



