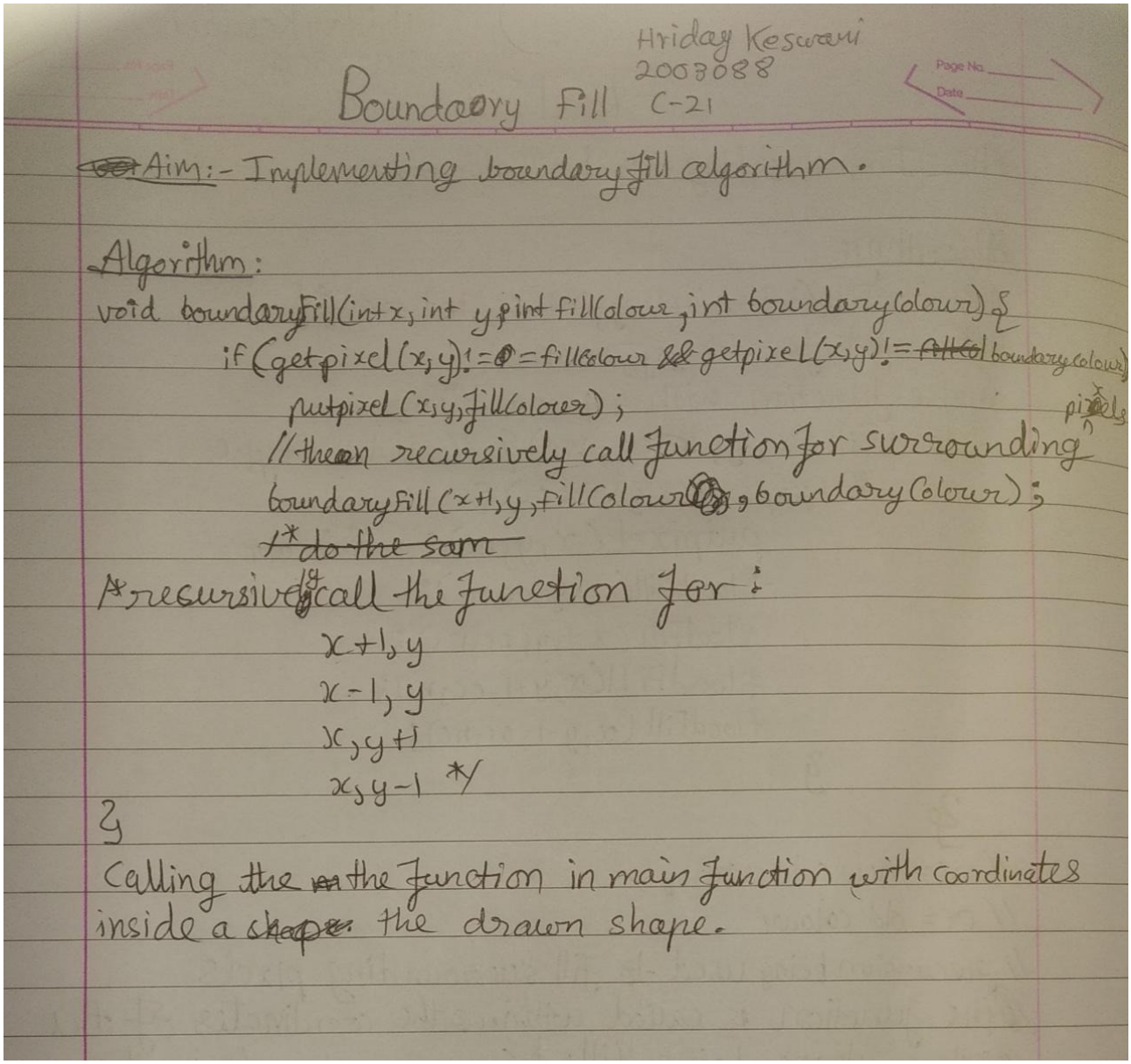
CG-Assignment
Flood Fill and Boundary Fill



Program:
Implementing Boundary Fill Algorithm

Code:

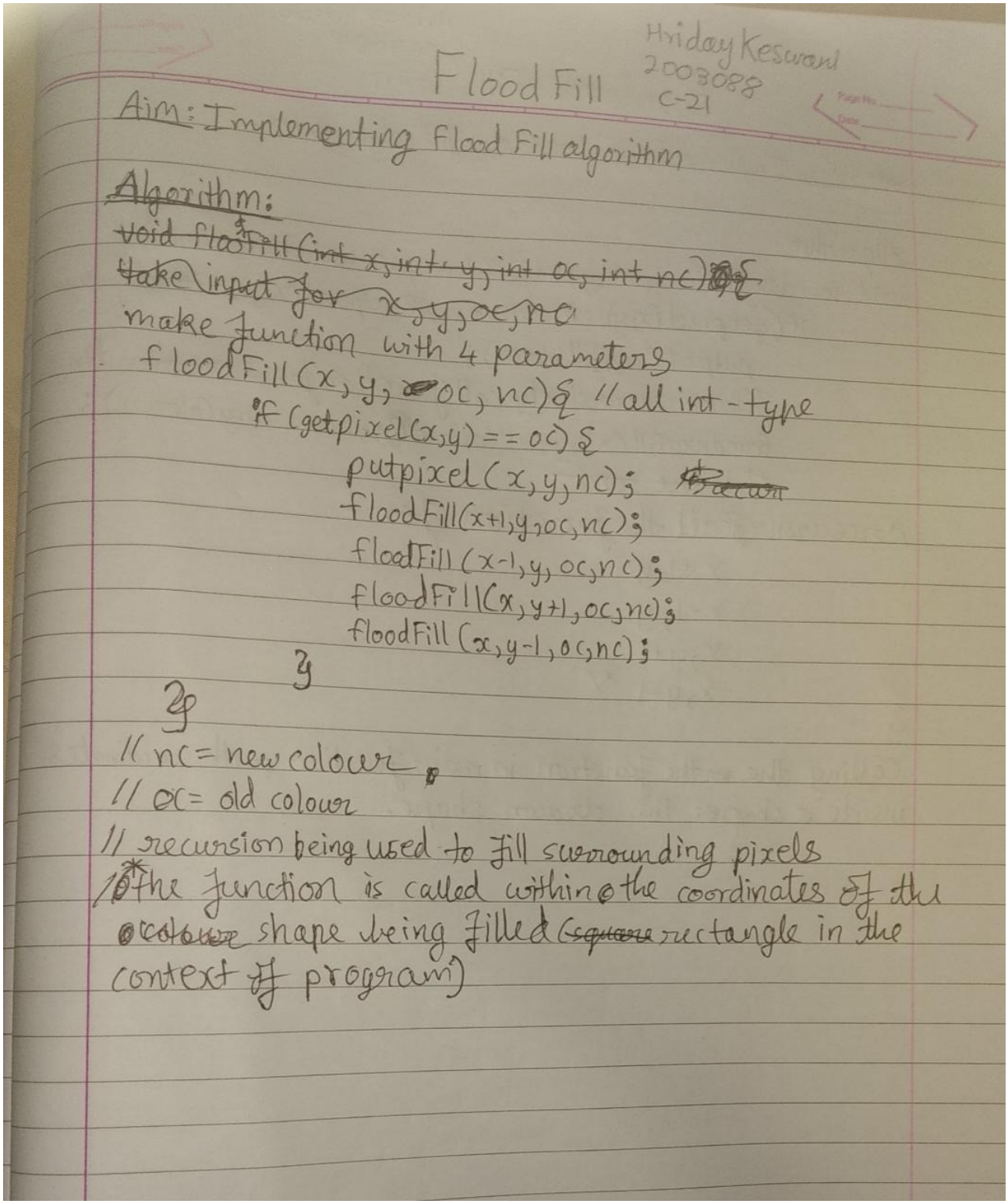
```
#include<stdio.h>
#include<graphics.h>
#include<conio.h>

void boundaryFill(int x, int y, int fillColour, int
boundaryColour){
     if(getpixel(x,y)!=fillColour && getpixel(x,y)!
=boundaryColour){
```

```
            putpixel(x,y,fillColour);
            boundaryFill(x+1,y,fillColour,boundaryColour);
            boundaryFill(x,y+1,fillColour,boundaryColour);
            boundaryFill(x-1,y,fillColour,boundaryColour);
            boundaryFill(x,y-1,fillColour,boundaryColour);
      }
}

void main()
{       int a,b,c,d;
      int gd = DETECT,gm;
      clrscr();
      initgraph(&gd,&gm,"C:\\turboc3\\bgi");
      printf("Enter the coordinates for start point\n");
      scanf("%d%d",&a,&b);
      printf("Enter the coordinates for the second point\n");
      scanf("%d%d",&c,&d);
      rectangle(a,b,c,d);
      printf("\nHriday Keswani\n2003088");
      boundaryFill(a+4,b+4,3,15);
      getch();
      closegraph();
}
```

Output:



Program:
Implementing Flood Fill Algorithm

Code:

```
#include<stdio.h>
#include<graphics.h>
```

```
#include<conio.h>
#include<stdio.h>
#include<graphics.h>
#include<conio.h>

void floodFill(int x, int y, int oc, int nc){
     if(getpixel(x,y)==oc){
          putpixel(x,y,nc);
          floodFill(x+1,y,oc,nc);
          floodFill(x-1,y,oc,nc);
          floodFill(x,y+1,oc,nc);
          floodFill(x,y-1,oc,nc);
     }
}

void main()
{       int a,b,c,d;
     int gd = DETECT,gm;
     clrscr();
     initgraph(&gd,&gm,"C:\\turboc3\\bgi");
     printf("Enter the coordinates for start point\n");
     scanf("%d%d",&a,&b);
     printf("Enter the coordinates for the second point\n");
     scanf("%d%d",&c,&d);
     rectangle(a,b,c,d);
     floodFill(a+10,b+10,0,15);
     printf("\nHriday Keswani\n2003088");
     getch();
     closegraph();
}
```

Output: