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|  | **Department of Information Technology** |

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| Semester | S.E. Semester III – INFT |
| Subject | Computer Graphics Lab |
| Laboratory Teacher: | Prof. Santosh Tamboli |
| Laboratory | - |

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| Student Name | Harsh Rawte | |
| Roll Number | 22101A0047 | |
| Grade and Subject Teacher’s Signature |  |  |

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| Experiment Number | 2 | |
| Problem Statement | Write a program to demonstrate Digital Differential Algorithm (DDA). | |
| Resources / Apparatus Required | Hardware: Desktop/Laptop | Software: TURBOC++ |
| Code: | #include <stdio.h>  #include <conio.h>  #include <math.h>  #include <graphics.h>  #include <dos.h>  int main()  {  clrscr();  int gd=DETECT,gm;  int x1,x2,y1,y2,dx,dy,i;  float st,x,y,xi,yi;  initgraph(&gd , &gm,"C:\\TURBOC3\\BGI");  printf("Enter the end points:");  scanf("%d %d %d %d",&x1,&y1,&x2,&y2);  dx = x2-x1;  dy = y2-y1;  if(abs(dx)>=abs(dy)){  st = abs(dx);  }  else  {  st = abs(dy);  }  xi = dx/st;  yi = dy/st;  putpixel(x,y,5);  for(i=1; i<=st; i++){  x =x+xi;  y =y+yi;  putpixel(x,y,5);  delay(10);  }  getch();  return 0;  } | |
| Output: |  | |