Report Homework 2 – Computer Graphics.

Student ID: 1351008.

Class: 13CTT.

I haven’t implemented Scanline Algorithm yet

|  |  |  |  |
| --- | --- | --- | --- |
|  | Boundary Fill ( ms / % of correctness) | Flood Fill ( ms / % of correctness) | Scan Line |
| Đường thẳng | n/a | n/a | n/a |
| Tg Đều | 1771 / 100% | 1764/ 100% | n/a |
| Tg Vuông cân | 1177 / 100% | 1170/ 100% | n/a |
| H Chữ Nhật | 2369/ 100% | 2369/ 100% | n/a |
| H Vuông | 2315/ 100% | 2314/ 100% | n/a |
| H Ngũ giác đều | 1995/ 100% | 1988/ 100% | n/a |
| H Lục Giác đều | 2447/ 100% | 2423/ 100% | n/a |
| H Tròn | 2838/ 100% | 2806/ 100% | n/a |
| H Elip | 2386/ 100% | 2381/ 100% | n/a |
| H Sao | 1185/ 100% | 1181/ 100% | n/a |
| H Mũi tên | 849/ 100% | 843/ 100% | n/a |
| H Cộng | 828/ 100% | 811/ 100% | n/a |
| H Trừ | 606/ 100% | 603/ 100% | n/a |
| H Nhân | 2131/ 100% | 2125/ 100% | n/a |
| H Chia | 1333/ 100% | 1318/ 100% | n/a |

In general, flood fill is a little bit faster than boundary fill

Complexity : O(n2) O(n2) n/a

Implementing complexity: Boundary Fill ~ Flood Fill, whereas Scan line is really complicated to implement