

Part 1:

```
C:\Users\soni2\github_repos\COMP371_A1>g++ part1.cpp && .\a.exe
8
size:8
01234567
```

Part 2:

```
C:\Users\soni2\github_repos\COMP371_A1>g++ part2.cpp && .\a.exe

***Point***
displaying point...
x: 3 y: 2 z: 3
displaying point...
x: 3 y: 5 z: 3
translating point by 5 in x axis...
displaying point...
x: 8 y: 5 z: 3
return result of translation : 0

***Triangle***
press 1 to display triangle coordinates on the screen. else press a
ny other key
1
displaying points...
x1: 8 y1: 5 z1: 3
x2: 1 y2: 2 z2: 3
x3: 9 y3: 8 z3: 7
translating triangle coordinates by 1 in the x axis...
translating point by 1 in x axis...
displaying point...
x: 9 y: 5 z: 3
translating point by 1 in x axis...
displaying point...
x: 2 y: 2 z: 3
translating point by 1 in x axis...
displaying point...
x: 10 y: 8 z: 7
displaying points...
x1: 9 y1: 5 z1: 3
x2: 2 y2: 2 z2: 3
x3: 10 y3: 8 z3: 7
calculating area...
x1: 9
y2-y3: -6
x2: 2
y3-y1: 3
x3: 10
y1-y2: 3
area: 0.5 * abs(x1*(y2-y3)+x2*(y3-y1)+x3*(y1-y2))
area: 0.5 * abs(9 * -6 + 2 * 3 + 10 * 3)
area: 0.5 * abs(-18)
the area of the triangle is: 9
Triangle destructor executed
Point destructor executed
Point destructor executed
Point destructor executed
```