# Appendix A(Vectoring in snake game)

## Vector calculation

I based calculation of vector based on formula: ( Xend -Xstart, Yend-Ystart); It takes two firsts elements of snake body. Thus, we can get for vector (In case, that snake turn on 90°): (1; 0), (-1; 0), (0; 1), (0; -1). Due to we can return only one value, I assign int from 0 to 3 to these vectors:

|  |  |  |
| --- | --- | --- |
| **X** | **Y** | **Assign value** |
| 1 | 0 | 0 |
| 0 | 1 | 1 |
| -1 | 0 | 2 |
| 0 | -1 | 3 |

## P.S

By this act, I also solve the turning question – we can add 1 or -1 to get left and right turn respectivelyю