**Algorithm of 2D Rotation of an object**

Steps:

* Initial coordinates of the object O = (Xold, Yold)
* Initial angle of the object O with respect to origin = Φ
* Rotation angle = θ
* New coordinates of the object O after rotation = (Xnew, Ynew)

This rotation is achieved by using the following rotation equations-

* Xnew = Xold x cosθ – Yold x sinθ
* Ynew = Xold x sinθ + Yold x cosθ