A Deployment provides declarative updates for Pods and Replica Sets (the next-generation Replication Controller). You only need to describe the desired state in a Deployment object, and the Deployment controller will change the actual state to the desired state at a controlled rate for you

Replica Set and Replication Controller do almost the same thing. Both of them ensure that a specified number of pod replicas are running at any given time. The difference comes with the usage of selectors to replicate pods. Replica Set use Set-Based selectors while replication controllers use Equity-Based selectors.