**1) GridSearchCV :**

We try every combination of a present list of values of the hyper-parameters and choose the best combination based on the cross validation score.  
**-** It takes a lot of time to fit (because it will try all the combinations)  
**+** gives us the best hyper-parameters.  
exemple ;  
{ 'C': [0.1, 1, 10, 100, 1000], 'gamma': [1, 0.1, 0.01, 0.001, 0.0001], 'kernel': ['rbf',’linear’,'sigmoid'] }

in this case we will try 5 \* 5 \* 3=75 combinations

**2) RandomSearchCV :**

Tries random combinations of a range of values (we have to define the number of iterations). It is good at testing a wide range of values and normally it reaches a very good combination very fast, **but the problem that it doesn’t guarantee to give the best parameter combination because not all parameter values are tried out** (recommended for big datasets or high number of parameters to tune.

\*\*-\*\* It doesn't guarantee that we have the best parameters

\*\*+\*\* faster because not all parameter values are tried out