1. Linear Regression:

- Code:
  sklearn.linear_model.**LinearRegression**(*, *fit_intercept=True*, *normalize=False*, *copy_X=True*, *n_jobs=None*, *positive=False*)
- **"LinearRegression"** fits a linear model with coefficients w=(w1,...,wp) to minimize the residual sum of squares between the observed targets in the dataset, and the targets predicted by the linear approximation. . In its fit method arrays X, y and will store the coefficients of the linear model in its coef_ member.

2. Logistic Regression:

- Code:
  sklearn.linear_model.**LogisticRegression**(penalty='l2', *, dual=False, tol=0.0001, C=1.0, fit_intercept=True, intercept_scaling=1, class_weight=None, random_state=None, solver='lbfgs', max_iter=100, multi_class='auto', verbose=0, warm_start=False, n_jobs=None, l1_ratio=None)
- Logistic regression, despite its name, is a linear model for classification rather than regression. Logistic regression is also known in the literature as logit regression, maximum-entropy classification (MaxEnt) or the log-linear classifier. In this model, the probabilities describing the possible outcomes of a single trial are modeled using a logistic function.

3. Ridge:

- Code:
  sklearn.linear_model.**Ridge**(*alpha=1.0*, *, *fit_intercept=True*, *normalize=False*, *copy_X=True*, *max_iter=None*, *tol=0.001*, *solver='auto'*, *random_state=None*)
- "Ridge" regression addresses some of the problems of Ordinary Least Squares by imposing a penalty on the size of the coefficients. The ridge coefficients minimize a penalized residual sum of squares. The complexity parameter alpha>0 controls the amount of shrinkage: the larger the value of alpha, the greater the amount of shrinkage and thus the coefficients become more robust to collinearity. In its fit method arrays X, y and will store the coefficients of the linear model in its coef_ member.

4. Lasso:

- Code:
  sklearn.linear_model.**Lasso**(*alpha=1.0*, *, *fit_intercept=True*, *normalize=False*, *precompute=False*, *copy_X=True*, *max_iter=1000*, *tol=0.0001*, *warm_start=False*, *positive=False*, *random_state=None*, *selection='cyclic'*)
- The Lasso is a linear model that estimates sparse coefficients. It is useful in some contexts due to its tendency to prefer solutions with fewer non-zero coefficients, effectively reducing the number of features upon which the given solution is dependent.