To find the following machine learning classification algorithm using accuracy value

Problem statement:

If the customer can or cannot be purchased the advertisement depends on the gender, age and estimated value. The dataset having n number of values, using a classification algorithm to predict whether the customer can be purchased or not.

SVM:

gamma	kernel	C(Hyper parameter)	Accuracy
scale	**rbf**	0.01	0.63
		0.1	0.76
		1.0	0.78
		10	0.79
		100	**0.80**
scale	poly	0.01	0.74
		0.1	0.74
		1.0	0.74
		10	0.74
		100	0.74
scale	sigmoid	0.01	0.63
		0.1	0.63
		1.0	0.49
		10	0.66
		100	0.66

In SVM Classification, when C=100, gamma=scale and kernel=rbf, accuracy value is **0.80.**

LOGISTIC CLASSIFICATION:

penalty	solver	C(Hyper parameter)	Accuracy
l2	**newton-cg**	0.01	0.87
		0.1	0.88
		1.0	**0.89**
		10	**0.89**
		100	**0.89**
l2	lbfgs	0.01	0.63
		0.1	0.63
		1.0	0.63
		10	0.63
		100	0.63
l2	liblinear	0.01	0.63
		0.1	0.63
		1.0	0.63
		10	0.63
		100	0.63

In logistic classification, the accuracy value is **0.89** when penalty=l2, solver=newton-cg and C=1.0(or)10(or)100.

DECISION TREE:

criterion	max_features	Accuracy
entropy	auto	0.89
	sqrt	0.89
	log2	0.89
gini	**auto**	**0.90**
	sqrt	**0.90**
	log2	**0.90**

In decision tree, the accuracy value is **0.90** when criterion=gini and max_features=auto(or) sqrt(or) log2.

RANDOM FOREST:

criterion	n_estimators	max_features	accuracy
entropy	10	auto	0.90
		sqrt	0.87
		log2	0.89
	100	auto	0.92
		sqrt	**0.93**
		log2	0.91
gini	10	auto	0.89
		sqrt	0.90
		log2	0.89
	100	auto	0.92
		sqrt	0.90
		log2	0.92

In random forest, the accuracy value is **0.93** when criterion= entropy, n_estimators=100 and max_features=sqrt.

FINAL MODEL:

The best model of classification algorithm:

RANDOM FOREST

Accuracy = 0.93