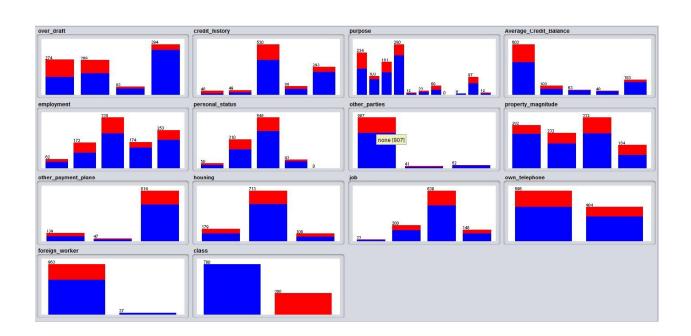
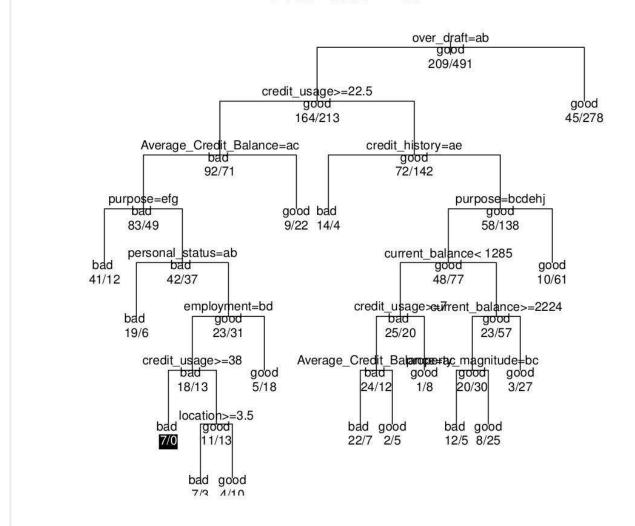
Attributes	Description	Data Type	Valid Ranges/Categories	
over_draft	Status of existing checking account	Qualitative	$\{<0,\ 0\le \ldots <200,\ \ge 20,\ {\rm no\ checking}\}$	
credit_usage	Duration in month	Numerical	_	
credit_history	Credit history	Qualitative	'no credits/all paid', 'all paid', 'existing paid',	
purpose	Purpose	Qualitative	'new car', 'used car', 'furniture/equipment',	
current_balance	Credit amount	Numerical		
$Average\_Credit\_Balance$	Savings account/bonds	Qualitative	$\{<100,\ 100\leq\ldots<500,\ 500\leq\ldots<1000,\ \ldots\}$	
employment	Present employment since	Qualitative	$\{ \text{unemployed}, \ <1, \ 1 \leq \ldots <4, \ 4 \leq \ldots <7, \ \geq 7 \}$	
location	Installment rate in percentage of disposable income	Numerical	-	
personal_status	Personal status and sex	Qualitative	'male div/sep', 'female div/dep/mar', 'male single',	
other_parties	Other debtors / guarantors	Qualitative	'none', 'co applicant', 'guarantor'	
residence_since	Present residence since	Numerical	<b>-</b> 2	
$property\_magnitude$	Property	Qualitative	'real estate', 'life insurance', 'car', 'no known property'	
cc_age	cc_age in months	Numerical	-	
$other\_payment\_plans$	Other installment plans	Qualitative	'bank', 'stores', 'none'	
housing	Housing	Qualitative	'rent', 'own', 'for free'	
existing_credits	Number of existing credits at this bank	Numerical		
job	Job	Qualitative	'unemp/unskilled non res', 'unskilled resident',	
$num\_dependents$	Number of people being liable to provide maintenance for	Numerical		
own_telephone	Telephone	Qualitative	'yes', 'none'	
foreign_worker	Foreign worker	Qualitative	'yes', 'no'	
class	Fraud status	Qualitative	'good', 'bad'	



## **Classification Tree**



## نتایج به دست آمده:

Measures	Navive Bayesian	Decision tree	
Accuracy	0.76	0.72	
95%CI	(0.70,0.80)	(0.66,0.77)	
Sensitivity	0.53	0.45	
Specificity	0.85	0.84	
P-Value	0.013	0.173	