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Question:
Explain the discretionary access control, mandatory access control, roll based access control in brief.

Answer:
In brief, access control is used to identify an individual is used to paste who does a specific job, authenticate them, and then proceed to give that individual only the key to the door or workstation that they need access to and nothing more.

1. Discretionary Access Control (DAC) Discretionary Access Control is a type of access control system that holds the business owner responsible for deciding which people are allowed in a specific location, physically or digitally.

DAC is the least restrictive compared to the other systems, as it essentially allows an individual complete control over any objects they own, as well as the programs associated with those objects.

The drawback to Discretionary Access Control is the fact that it gives the end-user complete control to set security level settings for other users and the permissions given to the end-user are inherited into other programs they use which could potentially lead to malware being executed without the end-user being aware of it.

2. Mandatory Access Control (MAC) Mandatory Access Control is more commonly utilized in organizations that require an elevated emphasis on the confidentiality and classification of data (ie. military institutions). MAC will typically classify all end users and provide them with labels that permit them to gain access through security with established security guidelines.