Configuring VTP

S2(config)# vtp domain CCNA	Sets the VTP domain
S2(config)# vtp mode [server|client|transparent]	Sets VTP mode
S2(config)# vtp password cisco	Sets VTP password to cisco
S2# show vtp status	Shows VTP configuration

VTP is used to make VLAN configuration more effortless. VLANs are configured on the VTP, while a VTP client simply synchronizes its configuration with the VTP server. A transparent switch forwards packets without synchronizing its configuration.

Configuring DTP

S1(config-if)# switchport mode *xyz*	Configures dynamic trunk link
xyz = access	Sets trunking mode to ACCESS
xyz = trunk	Sets trunking mode to TRUNK
xyz = dynamic desirable	Sets trunking mode to dynamic desirable
xyz = dynamic auto	Sets trunking mode to dynamic auto
S1(config-if)# switchport access vlan 10	Sets vlan 10 to an interface
S1# show interfaces trunk	To confirm trunk configuration

All variations of modes result in the TRUNK mode except when:
- one of both ports is set to access
- both ports are dynamic auto

LACP

S1(config)# interface range f0/*x*-*y*	Selects all interfaces from *x* to *y*
S1(config-if-range)# switchport mode trunk	Sets switchport mode to trunk
S1(config-if-range)# switchport trunk native vlan 99	Sets native VLAN to 99
S1(config-if-range)# channel-group 2 mode active	Adds the current interface(s) to channel group 2
S1(config-if-range)# no shutdown	Activates the interface(s)

LACP is an open source protocol for Link Aggregation.
Link Aggregation summarizes multiple physical connections into one virtual connection.

VLAN Configuration

S1(config)# vlan 10	Creates a VLAN with an id of 10
S1(config-vlan)# name test	Sets the name of a vlan
S1# show vlan brief	Shows vlan configuration

Extended VLANs

S1(config)# vtp mode transparent	Sets VTP mode to transparent
S1(config)# vlan 2222	Creates a vlan with an id of 2222

To be able to configure extendes VLANs, the vtp mode of the switch must be configured as transparent.
All VLANs with an id of 1006 or higher are extended VLANs.

EtherChannel

S1(config)# interface range f0/*x*-*y*	Selects all interfaces from *x* to *y*
S1(config-if-range)# channel-group 1 mode [mode]	Adds the current interface(s) to etherchannel 1
S1(config-if-range)# no shutdown	Activates the interface(s)
S1(config)# interface port-channel 1	Enters the configuration mode of etherchannel 1
S1(config-if)# switchport mode trunk	Sets the switchport mode
S1(config-if)# switchport trunk native vlan 99	Sets the native VLAN
S1# show etherchannel summary	Shows a summary of channel groups

EtherChannel is a Cisco-proprietary Link Aggregation.