Description for dnsdebian script

The script is started with a shebang (#!/bin/bash) if Linux system is not configured with the Bash shell by default. The domain name of the system is modified. The default domain name is “localdomain”. The “hostname” command is used to show the fully qualified domain name (FQDN) of the system. The “awk” command divides the FQDN by the period “.” and prints the second column of text, which is the domain name. The “ip -o link show” command shows the system’s network interfaces. The Ethernet interface was used to configure the DNS server. The three files mentioned in the script are:

1.“/etc/named.conf” is the DNS server’s configuration file

1. “/var/named/forward.[domain name]” is the DNS server’s forward zone file
2. “/var/named/reverse.[domain name]” is the DNS server’s reverse zone file

The forward zone file points the hosts in the forward zone to their respective IPv4 addresses with “A” records. The reverse zone file performs reverse lookups by pointing IPv4 addresses to their respective hosts. The “read” command in the script allows to enter the name of the network interface. The IPv4 address of the Ethernet interface is the “net\_int\_ip” variable . The “echo” command points the Ethernet interface’s IPv4 address to the system’s FQDN and saves this to the “/etc/hosts” file. The “oct\_1”, “oct\_2”, etc. variables are the octets of the IPv4 address. The “first\_3\_oct\_reverse” variable reverses the first 3 octets of the IPv4 address. The “desktop\_ip” variable is the IPv4 address of a host in the domain. The “bind” package installs the DNS server. The “bind-utils” package allows to query the DNS server. The forward and reverse lookup zones are inserted in the “/etc/named.conf” file. A file for the forward lookup zone was created by creating a copy of the “/var/named/named.localhost” file and entering the DNS records of the domain name and IP address at the end of the file. The reverse lookup zone file is created by making a copy of the forward lookup zone file.The “root” was configured as the user and “named” as the group that owns the forward and reverse lookup zone files, checks the validity of the files that were configured and restarts the DNS server so that the configurations will be implemented.To execute the shell script, the “sudo sh [file path of the script]” command was used since there are some commands in the script that require root access, like the firewall commands and editing files in the /var and /etc directories.