Answers

1. 18
2. grep -ri 'DEBUG|ERROR|INFO' /
3. echo "Ab1Cd2Ef3Gh4Ij5Kl6Mn7Op8Qr9St10Uv11Wx12Yz13" | sed -E 's/([A-Z])([a-z])[0-9]+/\L\1\2-/g' | sed 's/-$//'
4. Code:
   #!/bin/bash

```
set -e
check_braces() {
   local input="$1"
   local balance=0

   for (( i=0; i<${#input}; i++ )); do
      char="${input:$i:1}"
      if [[ "$char" == "{" ]]; then
         ((balance++))
      elif [[ "$char" == "}" ]]; then
         ((balance--))
      fi

      if (( balance < 0 )); then
         echo "false"
         return
      fi
   done

   if (( balance == 0 )); then
      echo "true"
   else
      echo "false"
   fi
}

read -p "Enter a string with braces: " user_input


check_braces "$user_input"
```

5.
Step 1:Install docker on the local meachine

Step 2: Create a **Dockerfile** with the smallest image possible to containerize it you can find the image and size and version on the official docker website.

Step 3: Build the docker file using the command

docker build

Step 4: We can test the docker file by running the command docker run followed by the port number exposed in the Docker file and with our docker hub username followed by the repository name and the tag name

docker run -p 8080:8080 guru/tagname .

Step 5: We can directly login to our docker hub from the terminal using the command

docker login

Step 6: Now we have to push our created docker Image to our docker hub using the command

docker push guru/test:tagname

Step 7**: We can login to our docker hub account and check that the created image is pushed successfully**

6. server {

```
    listen 80 default_server;
    root /var/www/html;
    server_name *.senpiper.com senpiper.com;

    location /api {
        proxy_pass http://localhost:8000/welcome/home;
    }
}
```