1. Create a directory named devops\_project in your home directory.
2. Inside the devops\_project folder, create the following structure using a single command:

devops\_project/

├── scripts/

├── bin/

└── tools/

└── logs/

**Solution for 1,2**

**mkdir -p ~/devops\_project/{scripts,bin/tools,logs}**

1. Create an empty file called deploy.sh under scripts/ folder.

**Solution for 3**

**touch ~/devops\_project/scripts/deploy.sh**

1. Use the echo command to add the line #!/bin/bash at the beginning of deploy.sh.

**Solution for 4**

**echo '#!/bin/bash' | cat - ~/devops\_project/scripts/deploy.sh > temp && mv temp ~/devops\_project/scripts/deploy.sh**

1. Add to deploy.sh commands to save the size and permissions of the devops\_project dir and sub-dirs to file logs/tree.txt using appropriate commands.

**Solution for 5**

#!/bin/bash

**mkdir -p logs**

**du -sh ~/devops\_project/\* > logs/tree.txt**

**find ~/devops\_project -printf '%M %s %p\n' >> logs/tree.txt**

1. Change the permissions to make the script executable for the owner only.

**Solution for 6**

**chmod 700 ~/devops\_project/scripts/deploy.sh**

1. Create a compressed archive of the entire devops\_project/ directory using tar.

**Solution for 7**

**tar -czvf devops\_project.tar.gz -C ~ devops\_project**