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| Tasks | Commands (to be written in terminal) |
| To access VM from your PC | ssh username@IP\_address |
| To open a directory in VM | cd name\_of\_directory |
| To unzip zipped folder in VM | unzip name\_of\_the\_folder |
| To open a virtual environment in VM | conda activate name\_virtual\_env |
| To start a background session in VM | screen -S mysession |
| To detach the host PC from ongoing session | Crtl+A+D |
| To delete any directory VM | rm -rf name\_of\_directory |
| To check if any program is running on any port VM | sudo lsof -i :port\_number |
| To kill already running program VM | sudo kill -9 PID |
| To open text file in VM | nano file\_name |
| To close the file | Ctrl+X |
| To run a flask app in VM | python3 app.py |

Steps to deploy the application on Virtual Machine:

Step 1: Zip the folder containing all the required files and folders.

Step 2: Copy the address of that zipped folder.

Step 3: Open terminal and write the below commands

scp address\_of\_zipped\_folder username@IP\_address:~/location\_on\_VM/

Step 4: After entering the password of your VM, your zipped folder will be transferred to VM in desired location.

Step 5: To access VM on your PC, write the below commands

ssh username@IP\_address

Step 6: After entering password, you will get in.

Step 7: To unzip files, go to desired location in VM and write the below commands

unzip folder\_name

Step 6: To start a background session, write the below commands

screen -S mysession

Step 7: After that, open a virtual environment created using conda that has all the necessary libraries used in your program. To open this, write the below commands

conda activate name\_of\_environment

Step 8: Now, go to the folder that you just unzipped, and write the below commands to start your flask application

python3 app.py

Step 9: After executing above commands, you will get a http address, using which you can access you webapp. So, copy that link and past it in your browser.

Step 10: After all this, you need to detach your PC from the VM. After detaching the program will continue to run in background of your VM. To detach press Ctrl+A+D.

For example: 

