Exp. 11 RPM:

Steps:

1.install rpm

       Sudo apt install rpm

2.setup RPM Build environment

       mkdir -p ~/rpmbuild/{BUILD,RPMS,SOURCES,SPECS,SRPMS}

3.To check setup

       tree ~/rpmbuild

4.create Script

```
$ cat << EOF >> hello.sh
#!/bin/sh
echo "Hello world"
EOF
```

       This creates a file hello.sh

4.Place script in desired Directory

```
$ mkdir hello-0.0.1
$ mv hello.sh hello-0.0.1
```

5.Make it as archive

```
$ tar --create --file hello-0.0.1.tar.gz hello-0.0.1
```

6.Move it to SOURCES directory

       $ mv hello-0.0.1.tar.gz ~/rpmbuild/SOURCES

7.Create hello.spec file

       nano ~/rpmbuild/SPECS/hello.spec

       And write below code in it

       Name: hello

       Version: 0.0.1

       Release: 1%{?dist}

       Summary: A simple hello world script

       BuildArch: noarch

       License: GPL

       Source0:   %{name}-%{version}.tar.gz

       Requires: bash

       %description

       A demo RPM build

       %prep

```
%setup -q

%build
# No build commands needed for a shell script

%install
mkdir -p %{buildroot}%{_bindir}
cp %{name}.sh %{buildroot}%{_bindir}/%{name}

%files
%{_bindir}/%{name}

%changelog
* Fri Nov 08 2024 Aaditya Patil <aaditya.patil@walchandsangli.ac.in> - 0.0.1-1
- First version being packaged
```

8.Check errors in .spec

    $ sudo apt install rpmlint

    rpmlint ~/rpmbuild/SPECS/hello.spec

9.Build Package

```
$ rpmbuild -bs ~/rpmbuild/SPECS/hello.spec
```

10.Create binary .rpm package:

    $ rpmbuild -bb ~/rpmbuild/SPECS/hello.spec

11.To install rpm package, convert it to debian using alien tool

    $ sudo apt update

    sudo apt install alien

12.Convert

    sudo alien -k ~/rpmbuild/RPMS/noarch/hello-0.0.1-1.noarch.rpm

13.install debian package

    sudo dpkg -i hello_0.0.1-1_all.deb

14.install missing dependencies

    sudo apt install -f

15 Check if its installed correctly

    ls /usr/bin/hello

16. Change permission to execute

    Sudo chmod +x /usr/bin/hello

17. Run the script, it will print hello world

    hello