**3) Write a Dockerfile (CentOS 7) to install the following in a Docker continer: Python 2.7 MongoDB - any version Apache tomcat 7 - running on port 8080 Please include comments at every command explaining what it does. Write the command to run the Dockerfile such that once the container boots, apache tomcat's home page is accessible from the host on port 7080.**

Vi dockerfile

FROM centos7 <--Base Image

MAINTAINER The reliance Project <emailid>

#We can install package using below command.

RUN yum -y update; yum clean all

RUN yum -y install epel-release; yum clean all

RUN yum -y install mongodb-server; yum clean all

RUN mkdir -p /data/db

#make port available to outside world.

EXPOSE 27017

ENTRYPOINT ["/usr/bin/mongod"]

#Updating repo sources if applicable

RUN yum -y update

################ START PYTHON INSTALLATIO####################

#Getting Necessary Development Tools on CentOs

RUN yum groupinstall -y development

#Downloading Additional Packages for version incompatabilities if applicable

RUN yum install -y zlib-dev openssl-devel sqlite-devel bzip2-devel

#Installing Python 2.7 in A Tmp Directory

RUN cd/tmp && wget http://www.python.org/ftp/python/2.7/Python-2.7.tar.xz

# Extraction and make/install the file

RUN tar -xvf /tmp/Python-2.7.tar.xz

RUN cd /tmp/Python-2.7 && ./configure --prefix=/usr/local && make && make install

########### START Apache tomcat 7 INSTALLATION ##########################

#Run assumes JavaSdk is not pre-installed in the container

#Downloading Java/Oracle JDK in a Tmp Directory

RUN cd/tmp && wget http://download.oracle.com/otn-pub/java/jdk/7u72-b14/jdk-7u72-linux-x64.tar.gz

#Unzip and Install the tar File

RUN cd/tmp;gunzip jdk-7u72-linux-x64.tar.gz

#Installing The make file

RUN alternatives –install /usr/bin/java java /opt/jdk1.7.0\_72/bin/java 2

#Downloading Apache Tomcat 7 in the same directory as previously installed Java

RUN cd /tmp;wget http://redrockdigimark.com/apachemirror/tomcat/tomcat-7/v7.0.75/bin/apache-tomcat-7.tar.gz

#Unzip and Install the tar File

RUN cd/tmp;tar -xvf apache-tomcat-7.0.75.tar.gz

#Dedicating the given port

EXPOSE 8080

#Building an image from docker file

docker build -t "relieneceDocker" .

#Running the instances of the dockerfile and giving <custom host post> as per question

docker run -i -t -p 7080:8080 relienceDocker