**Text file 4**

**1 Extract Date, country name, Year form the file named text.txt and print it to another file.**

**import** re  
**import** datetime  
  
filepath = **'kp.txt'**datepattern = **'%d-%m-%Y'  
with** open(filepath, **'r'**) **as** f:  
 file = f.read()  
x = re.findall(**'\d\d-\d\d-\d\d\d\d'**, file)  
y = []  
**for** item **in** x:  
 **try**:  
 date = datetime.datetime.strptime(item, datepattern)  
 y.append(date)  
 **except**:  
 **pass**res = []  
**for** item **in** y:  
 a, b = str(item).split(**' '**)  
 res.append(a)  
  
k=open(**'sa.txt'**,**'w'**)  
**for** item **in** res:  
 k.write(item)

**2 Extract mail id, contact no, city name from https://www.redbus.in/info/contactus and print it to another file**.

**import** re,urllib  
**import** urllib.request  
u=urllib.request.urlopen(**"https://www.redbus.in/info/contactus"**)  
text=u.read()  
*#numbers=re.findall('^[+][9][1]\d{10}$',str(text))  
#m=re.fullmatch('\w[a-zA-Z0-9\_.]\*@redbus[.]com',s)*numbers=re.findall(**'[0-9]{3}[0-9]{8}'**,str(text))  
  
**for** n **in** numbers:  
 print(n)

**3 Validate any land-phone no belongs to bangalore.**

**import** re  
  
phonenumber= **"080-12345678"**regex= **"^[0][8][0]-\d{8}$"  
  
if** re.search(regex, phonenumber):  
 print(**"Valid phone number"**)  
**else**:  
 print(**"Invalid phone number"**)

**Text file 6**

**1 Read all the driver versions.**

Get-WmiObject Win32\_PnPSignedDriver| select DeviceName, Manufacturer, DriverVersion

**2** **Read all the running and stopped processes in the system.**

**import** psutil  
psutil.process\_iter(attrs=**None**, ad\_value=**None**)  
**import** psutil  
*# Iterate over all running process***for** proc **in** psutil.process\_iter():  
 **try**:  
 *# Get process name & pid from process object.* processName = proc.name()  
 processID = proc.pid  
 print(processName , **' ::: '**, processID)  
 **except** (psutil.NoSuchProcess, psutil.AccessDenied, psutil.ZombieProcess):  
 **pass**

**or in powershell**

**Get-Process**

**Get-Process –id 0**

**3. Read all the network related information.**

**import** socket  
hostname = socket.gethostname()  
IPAddr = socket.gethostbyname(hostname)  
print(**"Your Computer Name is:"** + hostname)  
print(**"Your Computer IP Address is:"** + IPAddr)

or

import psutil

print(psutil.net\_io\_counters())

print(psutil.net\_connections())

print(psutil.net\_if\_addr())

print(psutil.net\_if\_stats())

or in powershell

netsh

netsh interface ipv4 show interfaces

Get-NetAdapter

**import** os  
os.chdir(**'C:/WINDOWS/system32'**)  
g=open(**'network.txt'**,**'r'**)  
print(g.read())

**4 Read keyboard and mouse information.**

In powershell

Get-PnpDevice –Class ‘Mouse’

Get-PnpDevice –Class ‘Keyboard’

**Text file 7**

**1 determine the computer name**

import socket

print(socket.gethostname())

**2. determine how much free memory a computer has**

Import psutil

Mem=psutil.virtual\_memory()

Print(mem**)**

**3. determine how much RAM is installed in a computer(same answer as question 2)**

**4 copy a folder**

**import** pprint  
**import** shutil  
**import** os  
os.chdir(**"C:/Users/Krishna/Desktop"**)  
shutil.copytree(**'automation'**,**'jt'**)

**5 terminate a process using a script**

Stop-Process -Name t\*,e\* -Confirm

Stop-Process -Name "notepad"

**6 find the name of the person currently logged on to a computer**

**import** getpass  
print(getpass.getuser())

**Text file8**

**1. Rename some file name.**

**import** os  
fd=**"kp.txt"**os.rename(fd,**"kp1.txt"**)

**2. Get file properties.**

**import** os.path  
**import** time  
os.chdir(**"C:/Users/Krishna/Desktop"**)  
  
print(**'File :'**,**' byhart.txt '**)  
print(**'Access time :'**, time.ctime(os.path.getatime(**'byhart.txt'**)))  
print(**'Modified time:'**, time.ctime(os.path.getmtime(**'byhart.txt'**)))  
print(**'Change time :'**, time.ctime(os.path.getctime(**'byhart.txt'**)))  
print(**'Size :'**, os.path.getsize(**'byhart.txt'**))

**3. Shut-down, restart system programatically.**

*# Python Program - Shutdown and Restart Computer***import** os;  
print(**"1. Shutdown Computer"**);  
print(**"2. Restart Computer"**);  
print(**"3. Exit"**);  
choice = int(input(**"\nEnter your choice: "**));  
**if**(choice>=1 **and** choice<=2):  
 **if** choice == 1:  
 os.system(**"shutdown /s /t 1"**);  
 **else**:  
 os.system(**"shutdown /r /t 1"**);  
**else**:  
 exit();