```
#1. Write a program to create a csv file that we can directly open in MS-Excel.
import csv

# Open a CSV file for writing
with open('data.csv', mode='w', newline='') as file:
    writer = csv.writer(file)

    # Write the header
    writer.writerow(['Name', 'Age', 'City'])

    # Write some rows of data
    writer.writerow(['Alice', 25, 'New York'])
    writer.writerow(['Bob', 30, 'London'])
    writer.writerow(['Charlie', 28, 'Paris'])

print("CSV file 'data.csv' created successfully!")
```

```
CSV file 'data.csv' created successfully!
```

```
#2. Read the data stored in MS-Excel file and convert it into a dictionary. The record
#contains rollno, name of student, marks of three subjects. Also calculate total.
#Display the dictionary data on the monitor.
import csv

# Open and read the CSV file
students = {}

with open('students.csv', mode='r') as file:
    reader = csv.reader(file)
    header = next(reader)  # Skip the header row

    for row in reader:
        rollno = row[0]
        name = row[1]
        marks1 = int(row[2])
        marks2 = int(row[3])
        marks3 = int(row[4])
        total = marks1 + marks2 + marks3

        students[rollno] = {
            'Name': name,
            'Marks1': marks1,
            'Marks2': marks2,
            'Marks3': marks3,
            'Total': total
        }

# Display the dictionary
for rollno, data in students.items():
    print(f"Roll No: {rollno} - {data}")
```

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#3. Accept contact details from the user and create a vcard
#that we can directly store in our mobile.
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# Accept contact details
name = input("Enter full name: ")
phone = input("Enter phone number: ")
email = input("Enter email address: ")
address = input("Enter address: ")

# Create vCard content
vcard = f"""BEGIN:VCARD
VERSION:3.0
FN:{name}
TEL;TYPE=CELL:{phone}
EMAIL:{email}
ADR;TYPE=HOME:;;{address}
END:VCARD
"""

# Save vCard to a .vcf file
filename = name.replace(" ", "_") + ".vcf"
with open(filename, 'w') as file:
    file.write(vcard)

print(f"vCard saved as '{filename}' successfully!")
```

```
Enter full name: Celeste
Enter phone number: 9999999999
Enter email address: celesteouana57@
Enter address: ghandinagar
vCard saved as 'Celeste.vcf' successfully!
```

```
#4. Create a specific subdirectory and copy one file from another subdirectory to this
# newly created subdirectory.

import os
import shutil

# Define source and destination
source_dir = 'source_folder'  # Existing folder where the file is
destination_dir = 'destination_folder'  # New folder to create
file_name = 'example.txt'  # File to copy

# Create destination directory if it doesn't exist
if not os.path.exists(destination_dir):
    os.makedirs(destination_dir)
    print(f"Directory '{destination_dir}' created.")

# Full path for source and destination file
source_file = os.path.join(source_dir, file_name)
destination_file = os.path.join(destination_dir, file_name)

# Copy the file
if os.path.exists(source_file):
    shutil.copy(source_file, destination_file)
    print(f"File '{file_name}' copied to '{destination_dir}'.")
else:
    print(f"Source file '{source_file}' does not exist.")
```

```
Directory 'destination_folder' created.
Source file 'source_folder/example.txt' does not exist.
```

```
#5. Write a program to copy contents of one file to another. While doing so,
#replace all lowercase characters into uppercase characters.

# Specify source and destination file names
source_file = 'source.txt'
destination_file = 'destination.txt'

# Open the source file for reading
with open(source_file, 'r') as src:
    # Open the destination file for writing
    with open(destination_file, 'w') as dest:
        # Read line by line from the source
        for line in src:
            # Convert lowercase letters to uppercase
            upper_line = line.upper()
            # Write the uppercase line to destination
            dest.write(upper_line)

print(f"Contents copied from '{source_file}' to '{destination_file}' with all letters in
```

```
#6. Write a program that merges lines alternatively from two files and writes the
#results to new file. If one file has less number of lines than the other,  the remainin
# lines from the larger file should be simply copied into the target file.
# Specify source and destination file names
source_file = 'source.txt'
destination_file = 'destination.txt'

# Open the source file for reading
with open(source_file, 'r') as src:
    # Open the destination file for writing
    with open(destination_file, 'w') as dest:
        # Read line by line from the source
        for line in src:
            # Convert lowercase letters to uppercase
            upper_line = line.upper()
            # Write the uppercase line to destination
            dest.write(upper_line)

print(f"Contents copied from '{source_file}' to '{destination_file}' with all letters in
```

```
#7. If an Employee object contains following details:
#empcode, empname, Date of Joining, Salary

class Employee:
    def __init__(self, empcode, empname, doj, salary):
        self.empcode = empcode
        self.empname = empname
        self.doj = doj
        self.salary = salary

    def display(self):
```

```
        print(f"Employee Code: {self.empcode}")
        print(f"Employee Name: {self.empname}")
        print(f"Date of Joining: {self.doj}")
        print(f"Salary: {self.salary}")

# Create an Employee object
emp1 = Employee(
    empcode="E001",
    empname="Alice Johnson",
    doj="2021-05-15",
    salary=55000
)

# Display the employee details
emp1.display()
```

```
Employee Code: E001
Employee Name: Alice Johnson
Date of Joining: 2021-05-15
Salary: 55000
```

```
#8. Given a text file, write a program to create another text file deleting the
#words ‘a’, ‘the’, ‘an’ and replacing each one of them with a blank space.

# Open the source file for reading
with open('source.txt', 'r') as src:
    # Open the destination file for writing
    with open('destination.txt', 'w') as dest:
        # Read the content of the source file
        content = src.read()

        # Replace the words 'a', 'the', 'an' with blank spaces
        modified_content = content.replace(' a ', ' ').replace(' the ', ' ').replace(' an

        # Write the modified content to the destination file
        dest.write(modified_content)

print("Words 'a', 'the', 'an' have been replaced with blank spaces and saved to 'destinat
```