Assignment 9 : Write a python program to perform File manipulations-open, close, read, write, append and copy from one file to another.

SOURCE CODE :

```
def open_file(file_name, mode):
    """Open a file in the specified mode."""
    try:
        file = open(file_name, mode)
        return file
    except IOError as e:
        print(f"Error opening file: {e}")
        return None

def close_file(file):
    """Close the file."""
    try:
        file.close()
    except IOError as e:
        print(f"Error closing file: {e}")

def read_file(file_name):
    """Read the content of a file."""
    try:
        with open(file_name, 'r') as file:
            content = file.read()
            return content
    except IOError as e:
        print(f"Error reading file: {e}")
        return None
```

```python
def write_file(file_name, content):
    """Write content to a file."""
    try:
        with open(file_name, 'w') as file:
            file.write(content)
    except IOError as e:
        print(f"Error writing to file: {e}")

def append_file(file_name, content):
    """Append content to a file."""
    try:
        with open(file_name, 'a') as file:
            file.write(content)
    except IOError as e:
        print(f"Error appending to file: {e}")

def copy_file(source_file, destination_file):
    """Copy content from one file to another."""
    try:
        with open(source_file, 'r') as src:
            content = src.read()
        with open(destination_file, 'w') as dest:
            dest.write(content)
    except IOError as e:
        print(f"Error copying file: {e}")
```

```python
def main():
    """Main function to demonstrate file manipulations."""
    source_file = 'source.txt'
    destination_file = 'destination.txt'

    # Write to a file
    write_file(source_file, "This is the source file content.\n")

    # Append to a file
    append_file(source_file, "Appending this line to the source fi
        .\n")

    # Read from a file
    content = read_file(source_file)
    if content:
        print("Source File Content:")
        print(content)

    # Copy content to another file
    copy_file(source_file, destination_file)

    # Read from the copied file
    copied_content = read_file(destination_file)
    if copied_content:
        print("Destination File Content:")
        print(copied_content)
```

```
if __name__ == "__main__":
    main()
```

OUTPUT :

```
Source File Content:
This is the source file content.
Appending this line to the source file.

Destination File Content:
This is the source file content.
Appending this line to the source file.
```