**Code 1:**

def reverse\_string(s):

reversed = ""

for i in range(len(s) - 1, -1, -1):

reversed += s[i]

return reversed

def main():

input\_string = "Hello, world!"

reversed\_string = reverse\_string(input\_string)

print(f"Reversed string: {reversed\_string}")

if \_\_name\_\_ == "\_\_main\_\_":

main()

**COMMENT:-** This is code no **Errors**

**Code2**:-  
  
def get\_age():

age = input("Please enter your age: ")

if age.isnumeric() and int(age) >= 18:

return int(age)

else:

return None

def main():

age = get\_age()

if age:

print(f"You are {age} years old and eligible.")

else:

print("Invalid input. You must be at least 18 years old.")

if \_\_name\_\_ == "\_\_main\_\_":

main()

**COMMENT:-**  In this condition , age.isnumeric() and int(age) >= 18 here I used type conversion for age and I converted as int(age) for checking the condition age>=18

**Code 3:-**

def read\_and\_write\_file(input\_filename,ouput\_filename):

try:

with open(filename, 'r') as file:

content = file.read()

with open(filename, 'w') as file:

file.write(content.upper())

print(f"File '{filename}' processed successfully.")

except Exception as e:

print(f"An error occurred: {str(e)}")

def main():

input\_filename = "sample.txt"

output\_filename = "output.txt"

read\_and\_write\_file(input\_filename,output\_filename)

if \_\_name\_\_ == "\_\_main\_\_":

main()

**Comment:-** Here if I use the same file(sample.txt) for the output also , then the output is overridden again and again.So I used output.txt as my output file**.**

**Code 4:-**

def merge\_sort(arr):

if len(arr) <= 1:

return

mid = len(arr) // 2

left = arr[:mid]

right = arr[mid:]

merge\_sort(left)

merge\_sort(right)

i = j = k = 0

while i < len(left) and j < len(right):

if left[i] < right[j]:

arr[k] = left[i]

i += 1

else:

arr[k] = right[j]

j += 1

k += 1

while i < len(left):

arr[k] = left[i]

i += 1

k += 1

while j < len(right):

arr[k] = right[j]

j += 1

k += 1

arr = [38, 27, 43, 3, 9, 82, 10]

merge\_sort(arr)

print(f"The sorted array is: {arr}")

**Comment:-** In this code 3rd line is error (**return arr**) i removed arr because the arr is repeated as same.