1.solved

# defining a function

def reverse\_string(s):

reversed = "" # initialization of string

# in reverse order looping of string

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

#appending each character to reversed string

reversed += s[i]

#returns reverse string

return reversed

# defining main function

input\_string = "Hello, world!"

# Calling the reversed\_string function

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

# Prints the reversed string

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

# Checking if this script is being running as the main program

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

main()

#output: Reversed string: !dlrow ,olleH

2.solved

# Defining a function

def get\_age():

age = input("Please enter your age: ") # user to enter their age

if age.isnumeric() and int(age) >= 18: # Checking if the input is a numeric value and if the age is 18 or older

return int(age) # Returns the age as an integer

else:

return None # Return None if the input is invalid or the age is below 18

# Define the main function

def main():

age = get\_age() # Calling get\_age function to get the user's age

if age:

print(f"You are {age} years old and eligible.") # If age is not None, print the user's age and eligibility

else:

# prints an error message, If age is None

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

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

main() # Calling the main function

#output: Please enter your age: 18

You are 18 years old and eligible.

3.solved

# Defining the function

def read\_and\_write\_file(filename):

try:

# Opening the file to read

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

content = file.read() # Read the content of the file

# opening the file to write

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

file.write(content.upper()) # Writing the content in uppercase back to the file

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

except Exception as e:

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

# Define the main function

def main():

filename = "succesfull.txt" # Specify the filename to be processed

read\_and\_write\_file(filename) # Call the read\_and\_write\_file function with the filename

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

main() # Calling the main function

output: File 'succesfull.txt' processed successfully.