def calculate\_premium(gender, year\_of\_birth, smoker):

if gender not in ['male', 'female']:

return "Invalid gender. Please use 'male' or 'female'."

if smoker not in ['yes', 'no']:

return "Invalid smoker status. Please use 'yes' or 'no'."

if not (1970 <= year\_of\_birth <= 2000):

return "Invalid year of birth. Please use a year between 1970 and 2000."

premium = 0

if gender == 'male':

if 1990 <= year\_of\_birth <= 2000:

premium = 35000

if smoker == 'no':

premium \*= 0.9

elif 1970 <= year\_of\_birth < 1990:

premium = 40000

if smoker == 'no':

premium \*= 0.95

elif gender == 'female':

if 1990 <= year\_of\_birth <= 2000:

premium = 30000

if smoker == 'no':

premium \*= 0.9

elif 1970 <= year\_of\_birth < 1990:

premium = 35000

if smoker == 'no':

premium \*= 0.95

return f"Your annual premium is Rs {premium:.2f}"

# Example usage

print(calculate\_premium('male', 1995, 'yes')) # Your annual premium is Rs 35000

print(calculate\_premium('male', 1985, 'no')) # Your annual premium is Rs 38000.00

print(calculate\_premium('female', 1995, 'no')) # Your annual premium is Rs 27000.00

print(calculate\_premium('female', 1980, 'yes'))# Your annual premium is Rs 35000