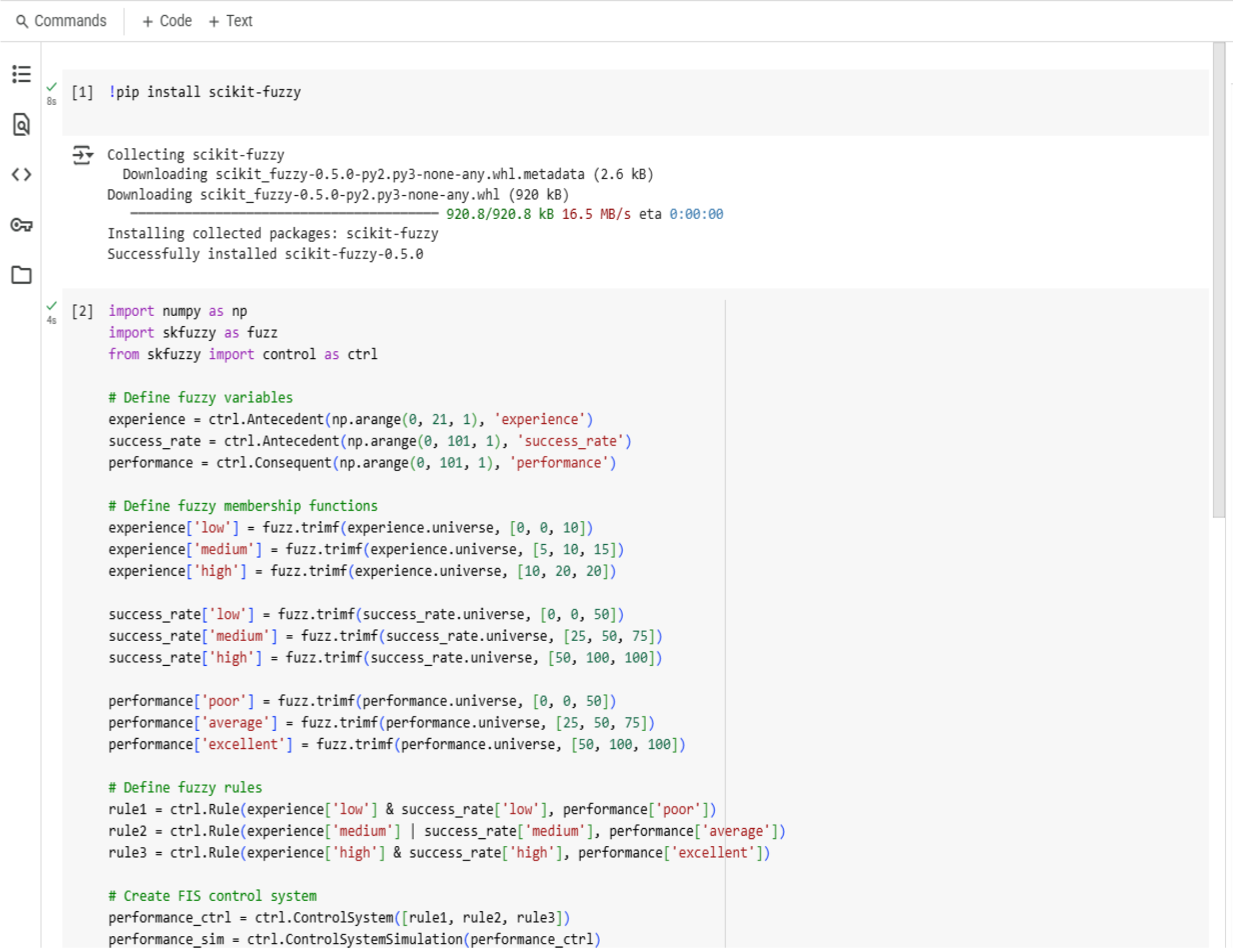
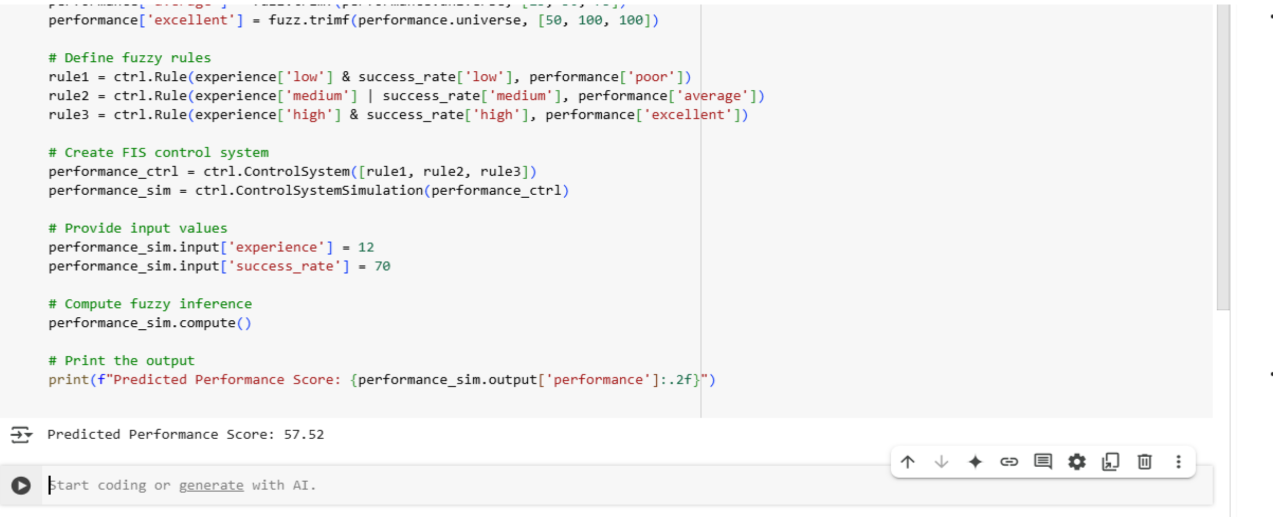


```
[1]  !pip install scikit-fuzzy
```

```
Collecting scikit-fuzzy
  Downloading scikit_fuzzy-0.5.0-py2.py3-none-any.whl.metadata (2.6 kB)
Downloading scikit_fuzzy-0.5.0-py2.py3-none-any.whl (920 kB)
   ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 920.8/920.8 kB 16.5 MB/s eta 0:00:00
Installing collected packages: scikit-fuzzy
Successfully installed scikit-fuzzy-0.5.0
```

```
[2]  import numpy as np
     import skfuzzy as fuzz
     from skfuzzy import control as ctrl

     # Define fuzzy variables
     experience = ctrl.Antecedent(np.arange(0, 21, 1), 'experience')
     success_rate = ctrl.Antecedent(np.arange(0, 101, 1), 'success_rate')
     performance = ctrl.Consequent(np.arange(0, 101, 1), 'performance')

     # Define fuzzy membership functions
     experience['low'] = fuzz.trimf(experience.universe, [0, 0, 10])
     experience['medium'] = fuzz.trimf(experience.universe, [5, 10, 15])
     experience['high'] = fuzz.trimf(experience.universe, [10, 20, 20])

     success_rate['low'] = fuzz.trimf(success_rate.universe, [0, 0, 50])
     success_rate['medium'] = fuzz.trimf(success_rate.universe, [25, 50, 75])
     success_rate['high'] = fuzz.trimf(success_rate.universe, [50, 100, 100])

     performance['poor'] = fuzz.trimf(performance.universe, [0, 0, 50])
     performance['average'] = fuzz.trimf(performance.universe, [25, 50, 75])
     performance['excellent'] = fuzz.trimf(performance.universe, [50, 100, 100])

     # Define fuzzy rules
     rule1 = ctrl.Rule(experience['low'] & success_rate['low'], performance['poor'])
     rule2 = ctrl.Rule(experience['medium'] | success_rate['medium'], performance['average'])
     rule3 = ctrl.Rule(experience['high'] & success_rate['high'], performance['excellent'])

     # Create FIS control system
     performance_ctrl = ctrl.ControlSystem([rule1, rule2, rule3])
     performance_sim = ctrl.ControlSystemSimulation(performance_ctrl)
```



```
performance['excellent'] = fuzz.trimf(performance.universe, [50, 100, 100])

# Define fuzzy rules
rule1 = ctrl.Rule(experience['low'] & success_rate['low'], performance['poor'])
rule2 = ctrl.Rule(experience['medium'] | success_rate['medium'], performance['average'])
rule3 = ctrl.Rule(experience['high'] & success_rate['high'], performance['excellent'])

# Create FIS control system
performance_ctrl = ctrl.ControlSystem([rule1, rule2, rule3])
performance_sim = ctrl.ControlSystemSimulation(performance_ctrl)
```

```
# Provide input values
performance_sim.input['experience'] = 12
performance_sim.input['success_rate'] = 70

# Compute fuzzy inference
performance_sim.compute()

# Print the output
print(f"Predicted Performance Score: {performance_sim.output['performance']:.2f}")
```

```
Predicted Performance Score: 57.52
```