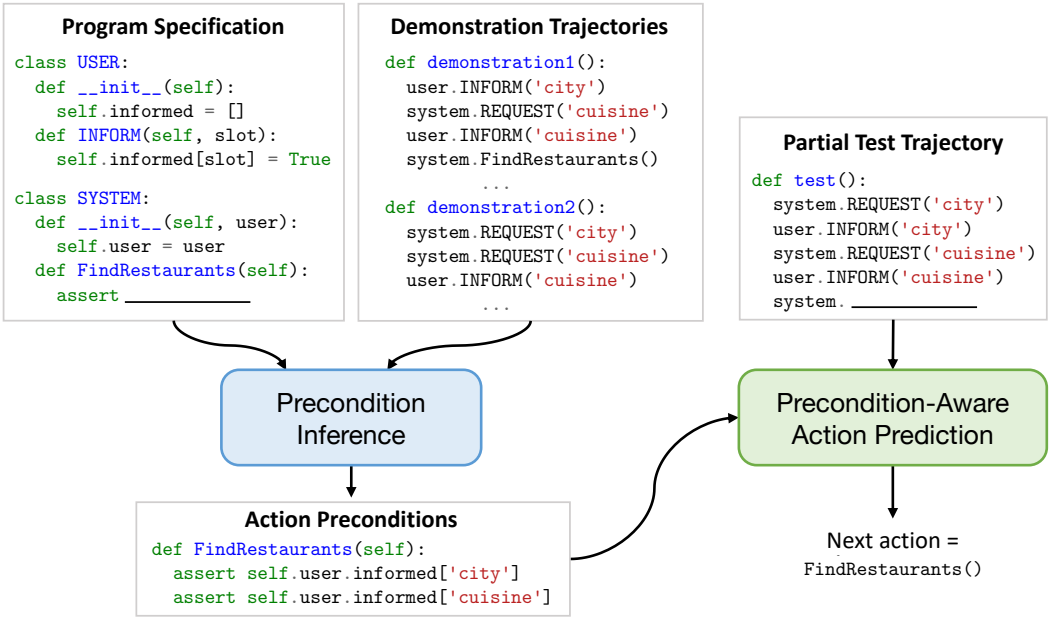

Program Specification
class USER:
def __init__(self):
self.informed = []
def INFORM(self, slot):
self.informed[slot] = True
class SYSTEM:
def __init__(self, user):
self.user = user
def FindRestaurants(self):
assert _____
Demonstration Trajectories
def demonstration1():
user.INFORM('city')
system.REQUEST('cuisine')
user.INFORM('cuisine')
system.FindRestaurants()
...
def demonstration2():
system.REQUEST('city')
system.REQUEST('cuisine')
user.INFORM('cuisine')
...
Partial Test Trajectory
def test():
system.REQUEST('city')
user.INFORM('city')
system.REQUEST('cuisine')
user.INFORM('cuisine')
system._____
Precondition Inference
Precondition-Aware Action Prediction
Action Preconditions
def FindRestaurants(self):
assert self.user.informed['city']
assert self.user.informed['cuisine']
Next action =
FindRestaurants()