```
Code:
def ask symptom(symptom):
  return input(f"Do you have {symptom}? ").lower() == "yes"
def load diseases(file path):
  diseases = {}
  with open(file path, 'r') as file:
     for line in file:
       disease, symptoms = line.strip().split(':')
       symptoms = [symptom.strip() for symptom in symptoms.split(',')]
       diseases[disease] = symptoms
  return diseases
def diagnose disease(diseases):
  for disease, disease symptoms in diseases.items():
     if all(ask symptom(s) for s in disease symptoms):
       print("You have: ", disease)
def main():
  print("Please answer the following questions about your symptoms.")
  diseases = load diseases('diseases.txt')
  symptoms to ask = list(set(symptom for disease symptoms in diseases.values() for
symptom in disease symptoms))
  diagnose disease(diseases)
if __name__ == "__main__":
  main()
```

Diseases.text

Flu: fever, cough, sore throat, body aches

Allergies: sneezing, itching, runny nose, watery eyes

Diabetes: frequent urination, increased thirst, unexplained weight loss, fatigue

Heart Disease: chest pain, shortness of breath, fatigue, nausea Asthma: coughing, wheezing, shortness of breath, chest tightness

Hypertension: high blood pressure, dizziness, headaches, blurred vision

Alzheimer's Disease: memory problems, decline in non-memory aspects of cognition, increased

confusion, behavior changes

OUTPUT:

Please answer the following questions about your symptoms.

Do you have fever? : yes Do you have cough? : yes Do you have sore throat? : yes Do you have body aches? : yes

You have: Flu

Do you have sneezing? : yes Do you have itching? : yes Do you have runny nose? : yes Do you have watery eyes? : yes

You have: Allergies

Please answer the following questions about your symptoms.

Do you have memory problems? yes

Do you have decline in non-memory aspects of cognition? yes

Do you have increased confusion? yes Do you have behavior changes? yes

You have: Alzheimer's Disease