

APPLIED ARTIFICIAL INTELLIGENCE

EXPERIMENT – 01

```
print("=== Welcome to the Car Diagnostic System ===")

print("Please answer the following questions by typing 1 for 'Yes' and 2 for 'No'.")

def ask(question):
    while True:
        print(question)
        print("1. Yes")
        print("2. No")
        choice = input("Your choice: ").strip()
        if choice == "1":
            return True
        elif choice == "2":
            return False
        else:
            print("Please enter 1 for Yes or 2 for No.\n")

# Start diagnosis
if not ask("Does the car start?"):
    if ask("Are the lights dim?"):
        print("\nDiagnosis: Battery is dead")
    else:
        if ask("Does the radio work?") and ask("Are the lights bright?"):
            print("\nDiagnosis: Starter motor issue")
        else:
            if ask("Does the engine crank?"):
                if ask("Do you smell fuel?"):
                    print("\nDiagnosis: Engine is flooded")
                elif ask("Do you NOT smell fuel?"):
                    print("\nDiagnosis: Fuel pump failure")
```

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else:

print("\nDiagnosis: Could not determine the issue")

else:

print("\nDiagnosis: Could not determine the issue")

else:

if ask("Does the car stall frequently?") and ask("Is the engine idle rough?"):

print("\nDiagnosis: Spark plug problem")

else:

print("\nThe car seems to be working fine, or the issue is unknown.")

```
===== RESTART: D:/pg subjects/sem 2/python/practical/pgm1.py =====  
=== Welcome to the Car Diagnostic System ===  
Please answer the following questions by typing 1 for 'Yes' and 2 for 'No'.  
Does the car start?  
1. Yes  
2. No  
Your choice: 2  
Are the lights dim?  
1. Yes  
2. No  
Your choice: 1  
  
Diagnosis: Battery is dead
```