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Shri Vaishnav Institute of Information Technology

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```
# Perform inference
```

```
inference = VariableElimination(model)
```

```
# Query 1: Probability of Traffic given Rain and Accident
```

```
query_result = inference.query(variables=['Traffic'], evidence={'Rain': 1, 'Accident': 1})
```

```
print("\nProbability of Traffic given Rain and Accident:")
```

```
print(query_result)
```

```
# Query 2: Probability of Umbrella given Rain
```

```
query_result = inference.query(variables=['Umbrella'], evidence={'Rain': 1})
```

```
print("\nProbability of Umbrella given Rain:")
```

```
print(query_result)
```

Output :