

Experiment 8: Draw a DD path graph for the program written for experiment 6.

Solution:

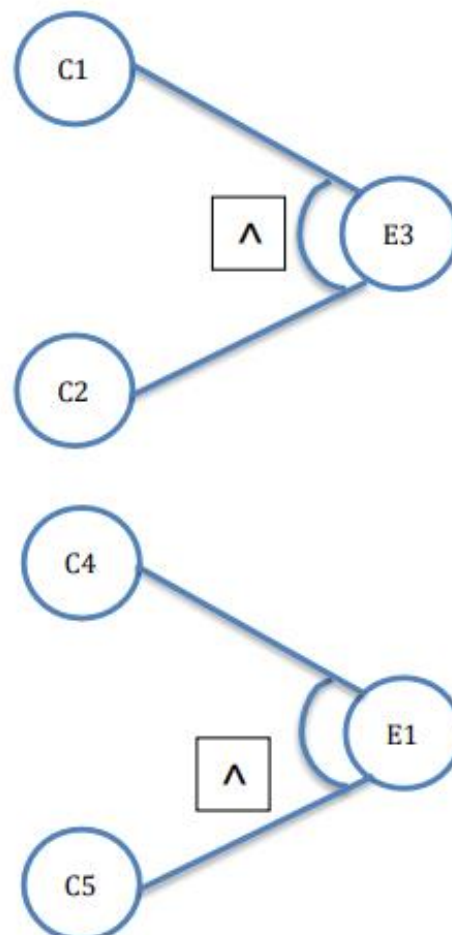
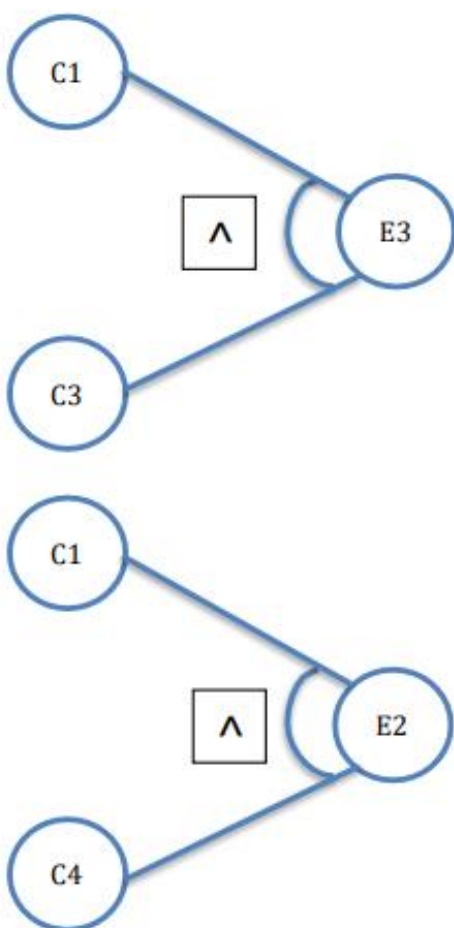
Causes:

C1: Side x is equal to side y
C2: Side x is equal to side z
C3: Side z is equal to side y
C4: Side z not equal to y C5:
Side x not equal to y C6:
Side x not equal to z

Effects:

E1: Scalene Triangle E2:
Isosceles Triangle E3:
Equilateral Triangle

Cause-Effect Graphing:



Decision Table:

Case	x	y	z	Expected Output	Actual Output
1	50	50	50	Equilateral	Equilateral
2	50	50	60	Isosceles	Isosceles
3	3	4	5	Scalene	Scalene
4	3	2	2	Isosceles	Isosceles
5	2	3	2	Isosceles	Isosceles
6	10	10	10	Equilateral	Equilateral
7	8	9	10	Scalene	Scalene

Output:

```
Input three sides of triangle: 50 50 50
This is an equilateral triangle.
```

```
Input three sides of triangle: 50 50 60
This is an isosceles triangle.
```

```
Input three sides of triangle: 3 4 5
This is a scalene triangle.
```

```
Input three sides of triangle: 3 2 2
This is an isosceles triangle.
```

```
Input three sides of triangle: 2 3 2
This is an isosceles triangle.
```

```
Input three sides of triangle: 10 10 10
This is an equilateral triangle.
```

```
Input three sides of triangle: 1 1 1
This is an equilateral triangle.
```

```
Input three sides of triangle: 8 9 10
This is a scalene triangle.
```