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Experiment No.: 10

Problems

Question 1
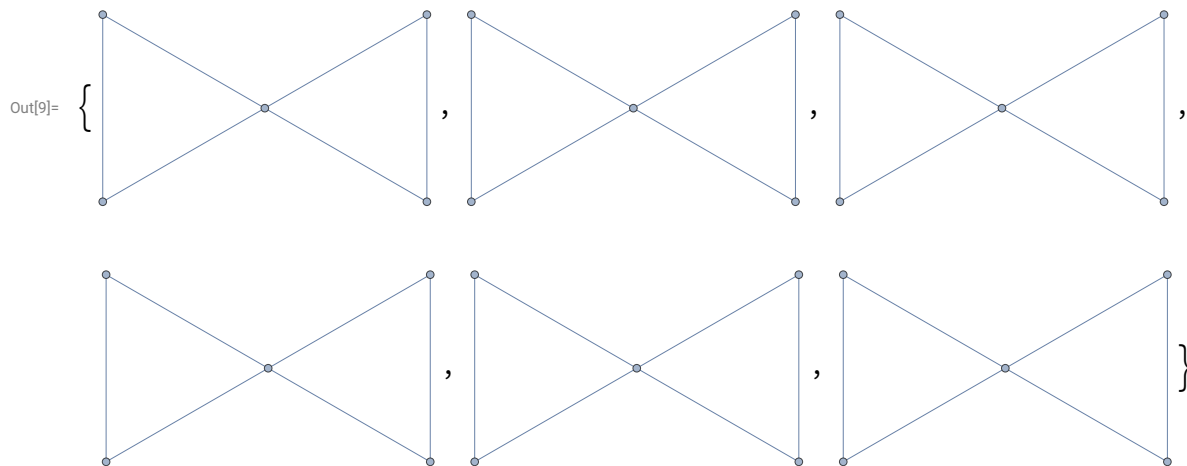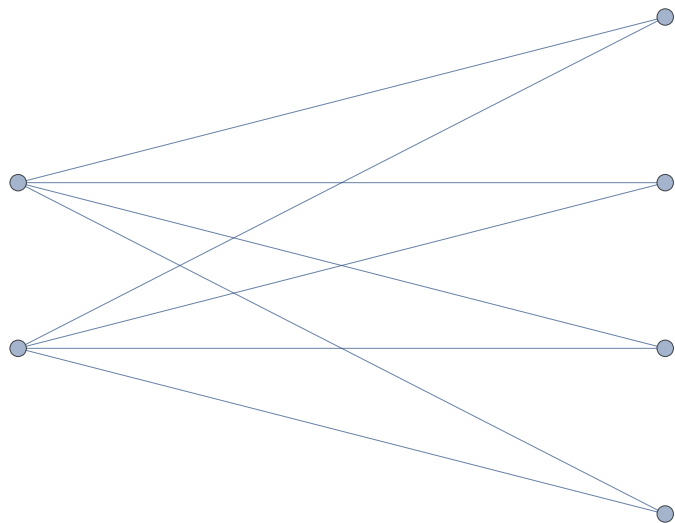
In[7]:= ```
g = GraphData["ButterflyGraph"];
FindEulerianCycle[g];
Table[HighlightGraph[g, Part[First[%], 1 ;; i]], {I, Length[First[%]]}]
```

💬 **Part**: 1 ;; i is not a valid Span specification. A Span specification should be 1, 2, or 3 machine–sized integers separated by ;;. (Any of the integers can be omitted or replaced with All.)

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💬 **Part**: 1 ;; i is not a valid Span specification. A Span specification should be 1, 2, or 3 machine–sized integers separated by ;;. (Any of the integers can be omitted or replaced with All.)

💬 **General**: Further output of Part::span will be suppressed during this calculation.

Out[9]= 

Question 2

In[10]:= `GraphData[{"DutchWindmill", {3, 6}}]`
`GraphData[{"DutchWindmill", {3, 6}}];`
`EulerianGraphQ[%]`

Out[10]=



Out[12]=

True

Question 3

```
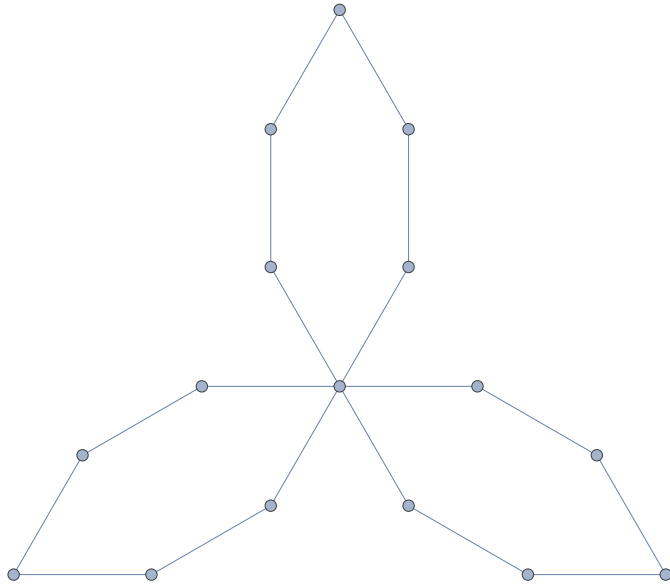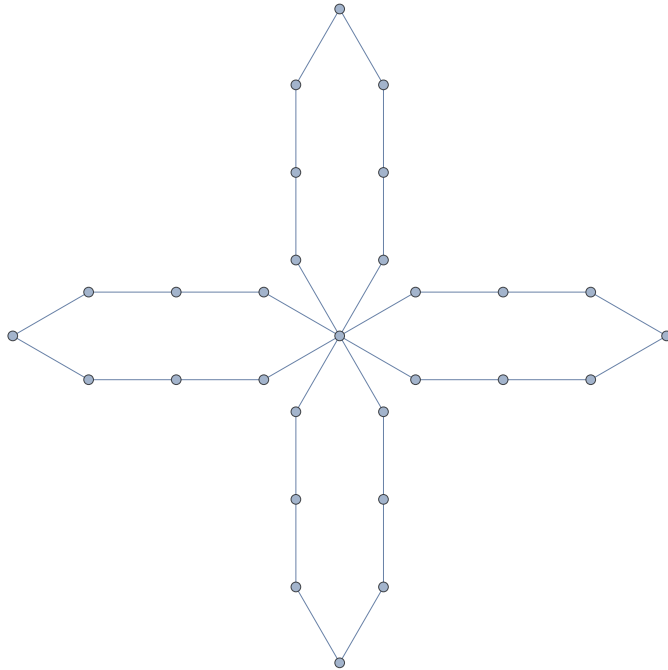In[13]:= GraphData[{"DutchWindmill", {4, 8}}]
         GraphData[{"DutchWindmill", {4, 8}}];
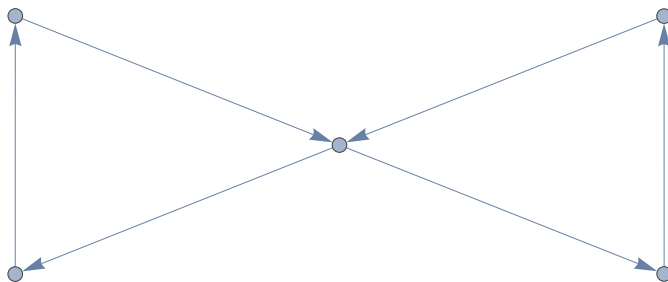         EulerianGraphQ[%]
```

Out[13]=

Out[15]=

True

Question 4

```
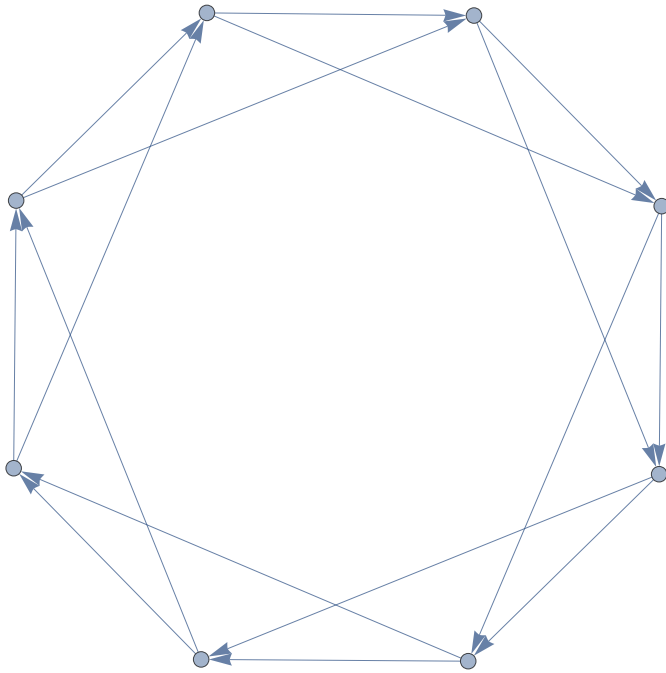In[17]:= g = Graph[{1 → 2, 2 → 3, 3 → 1, 3 → 4, 4 → 5, 5 → 3}]
```

Out[17]=

Question 5

In[18]:= `g = Graph[{1 → 8, 8 → 7, 7 → 6, 6 → 5, 5 → 8, 8 → 4,`
`4 → 7, 7 → 3, 3 → 6, 6 → 2, 2 → 5, 5 → 1, 1 → 4, 4 → 3, 3 → 2, 2 → 1}]`

Out[18]=

Question 6

In[19]:= `g = CompleteGraph[{2, 4}]`

`EulerianGraphQ[g]`

`EulerianGraphQ[LineGraph[g]]`

Out[19]=

Out[20]=

True

Out[21]=

True

Question 7

In[25]:= `g = CompleteGraph[5]`
`EulerianGraphQ[g]`
`HamiltonianGraphQ[LineGraph[g]]`

Out[25]=

Out[26]=

True

Out[27]=

True