**Practical work assignments 3**

In this work, each student will have to complete two tasks according to their variant number. The variant number corresponds to the student's number in the journal.

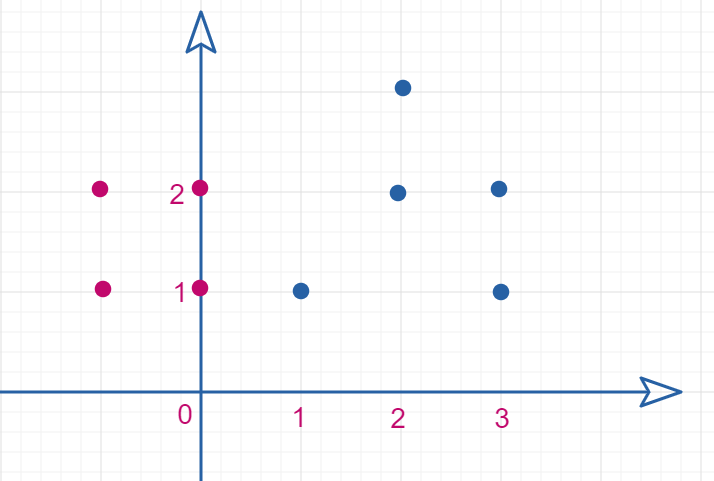
**Task 1**

Objects are defined by two features and are represented by points on a two-dimensional plane.

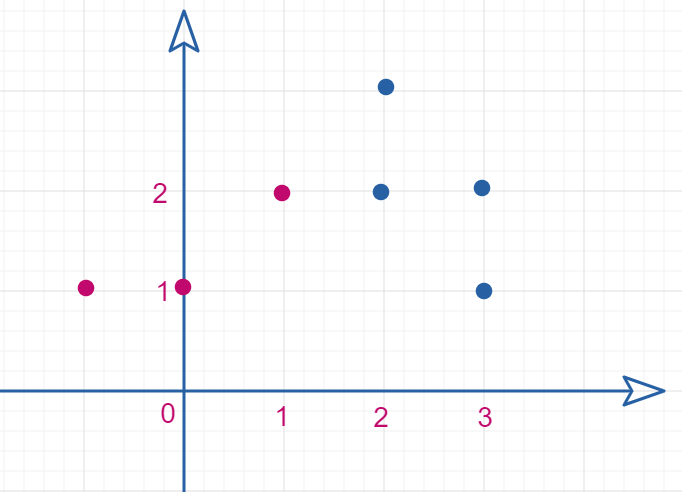
Construct a separating hyperplane. Use SVM data classification algorithm.

**Variants:**

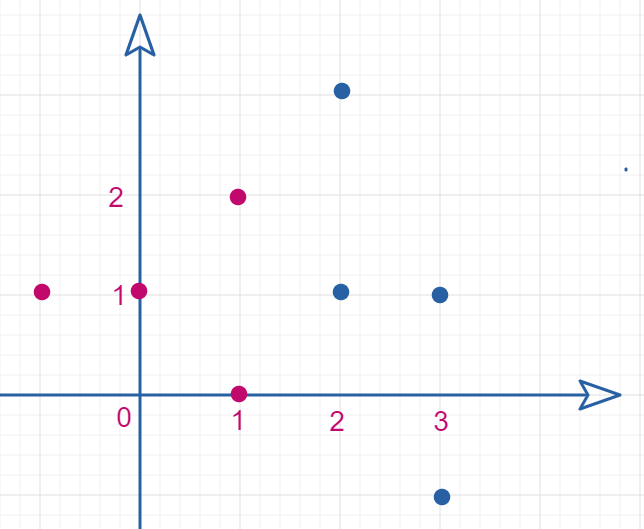
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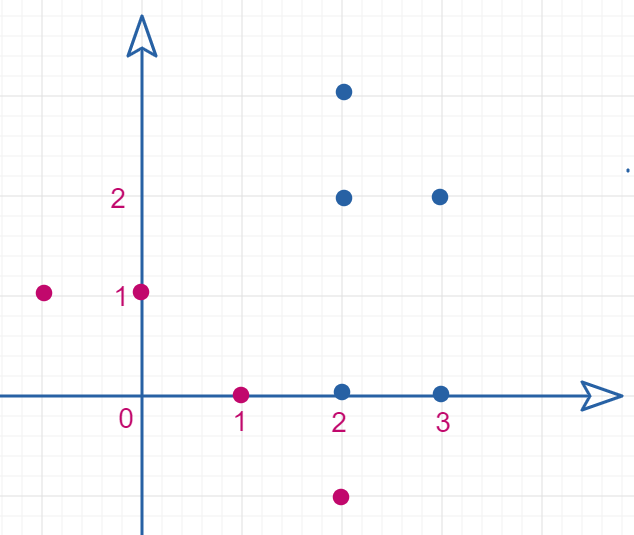
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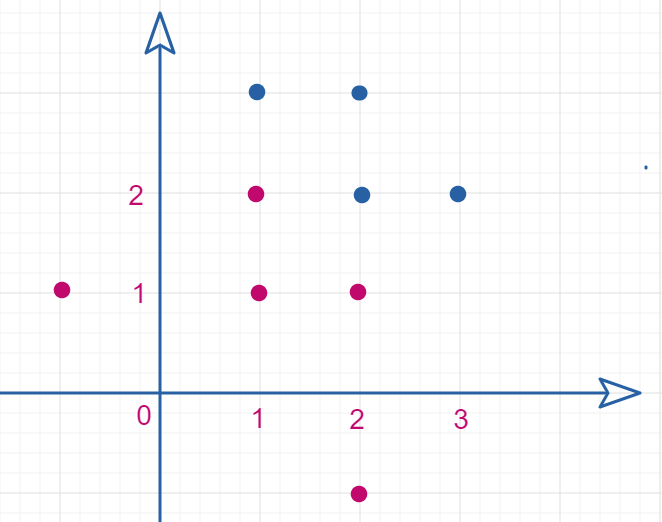
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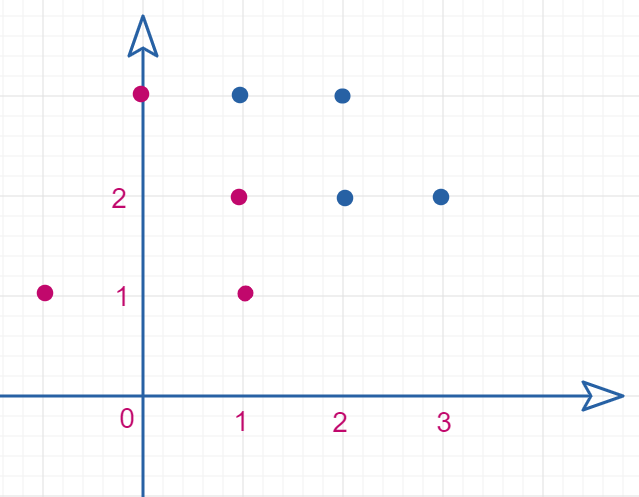
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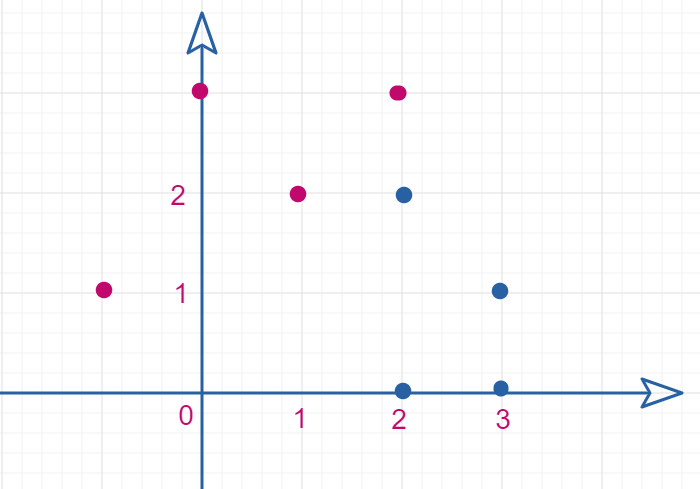
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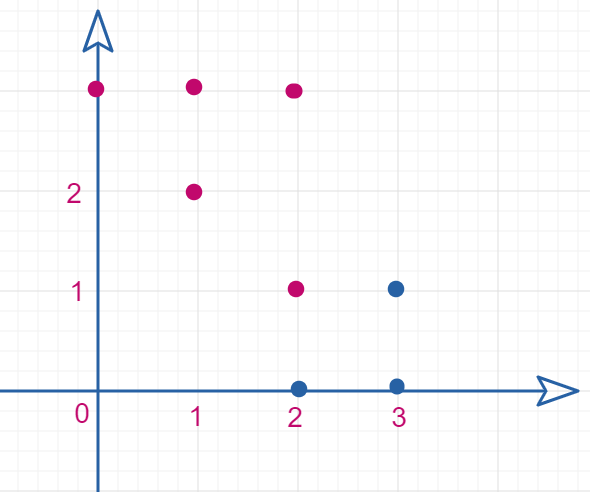
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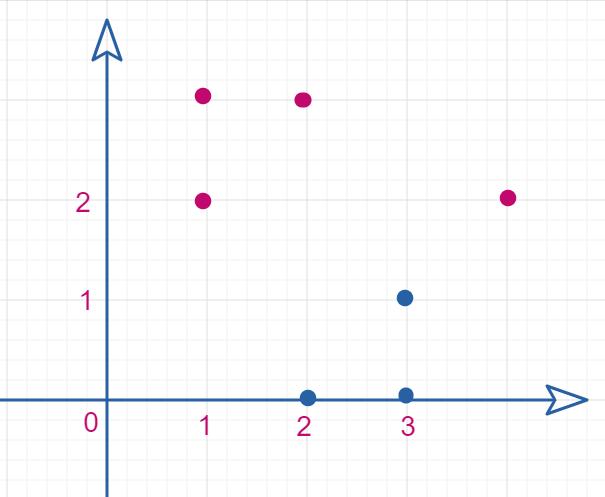
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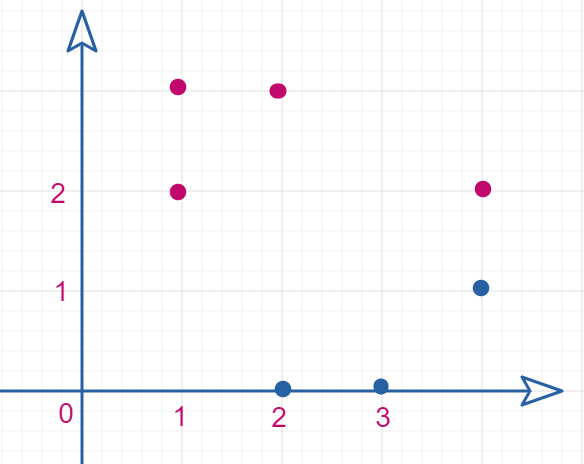
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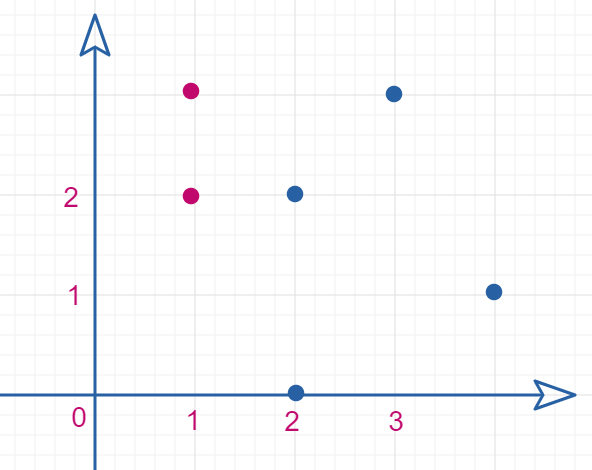
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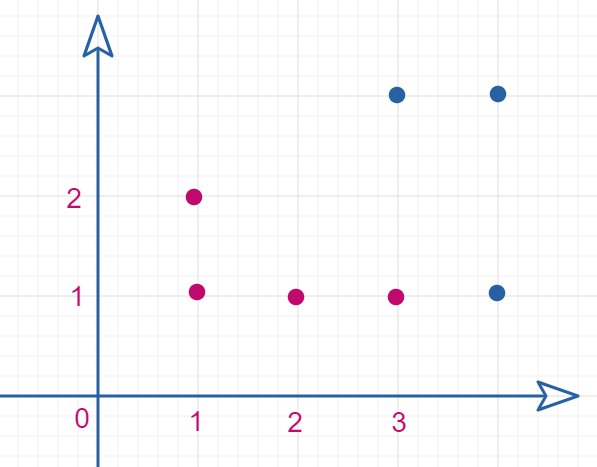
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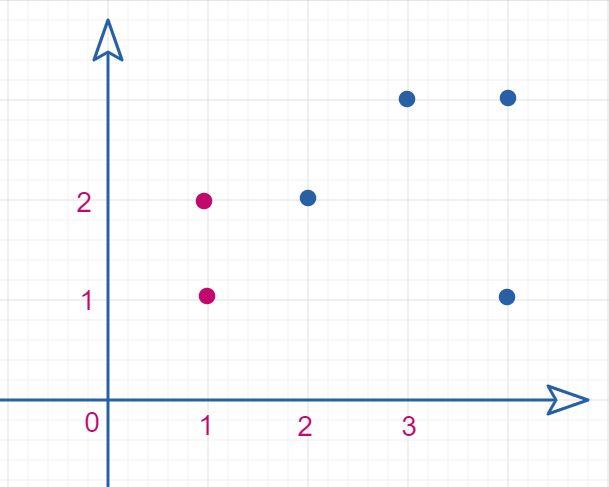
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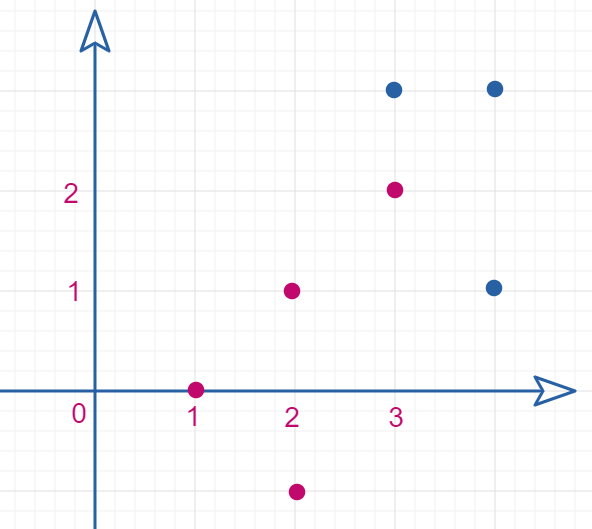
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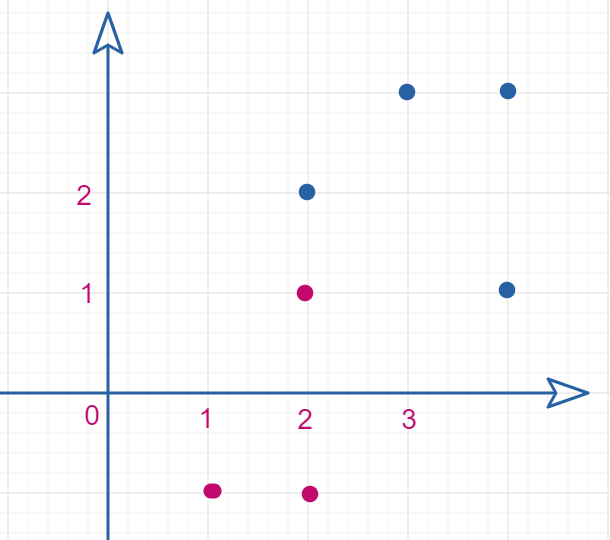
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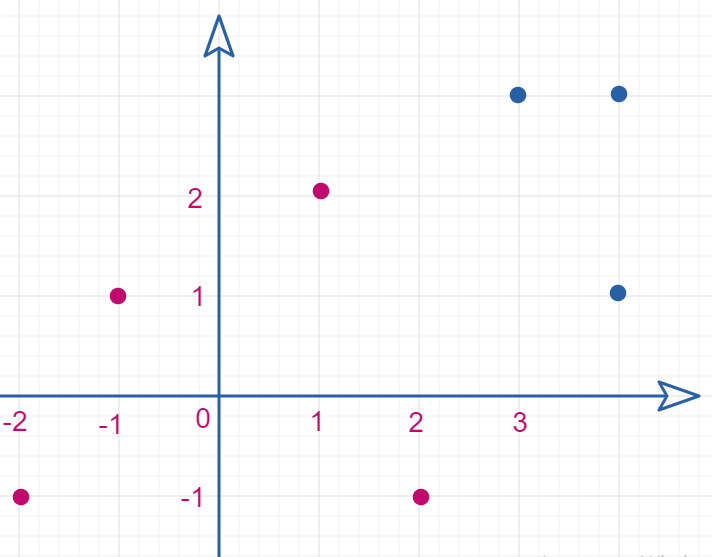
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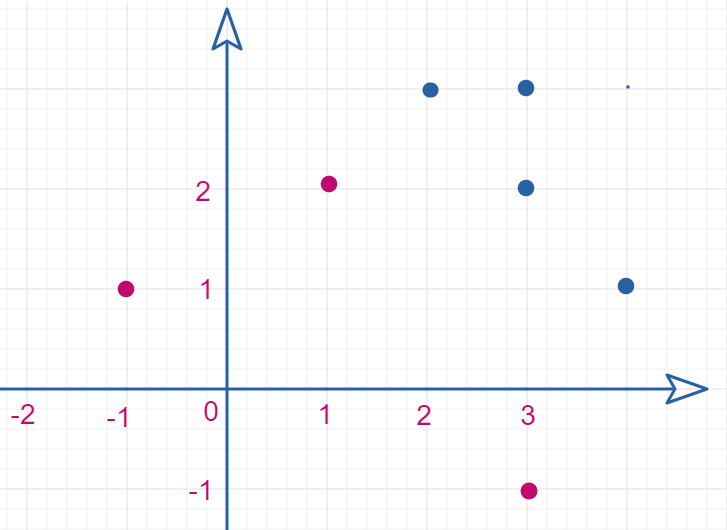
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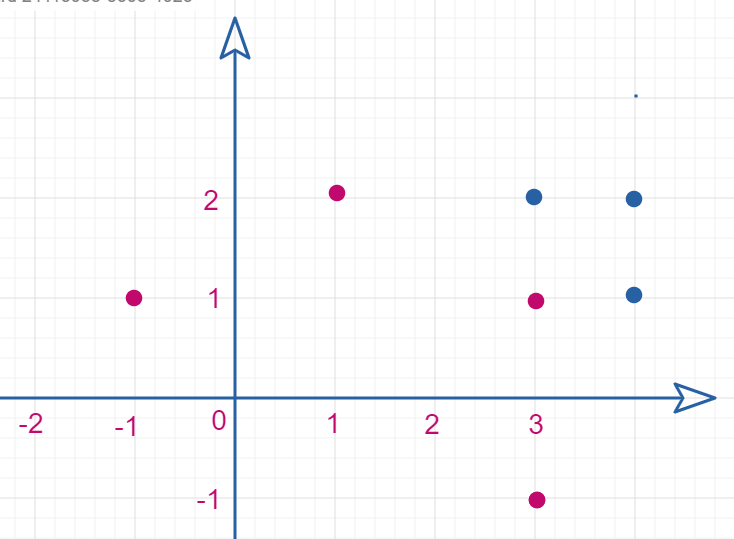
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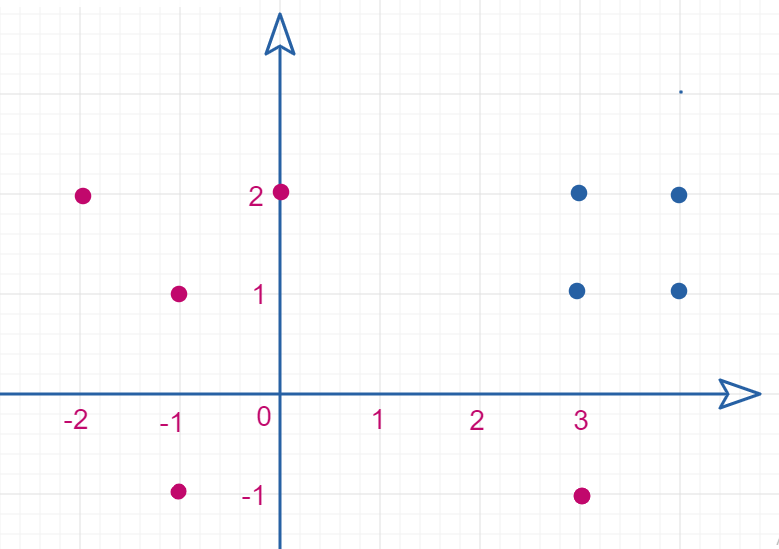
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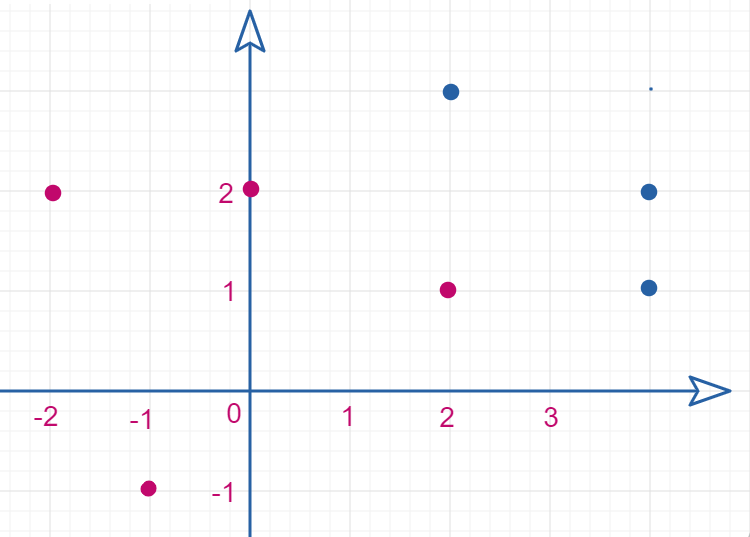
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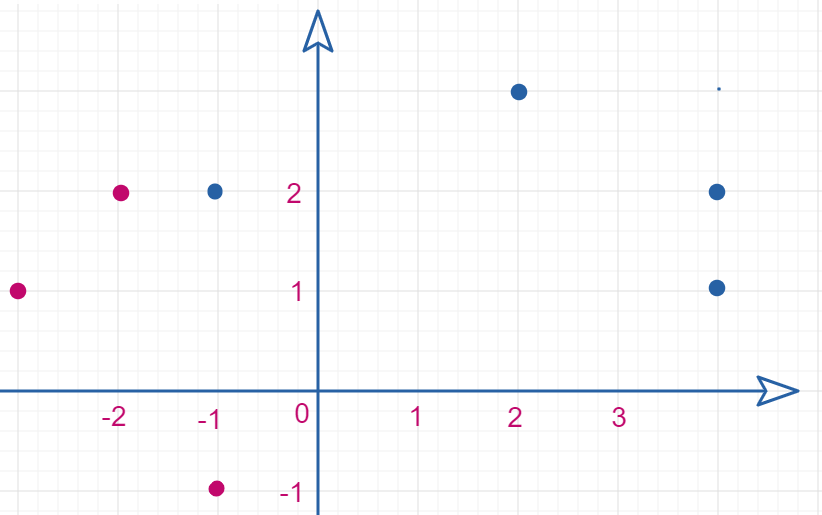
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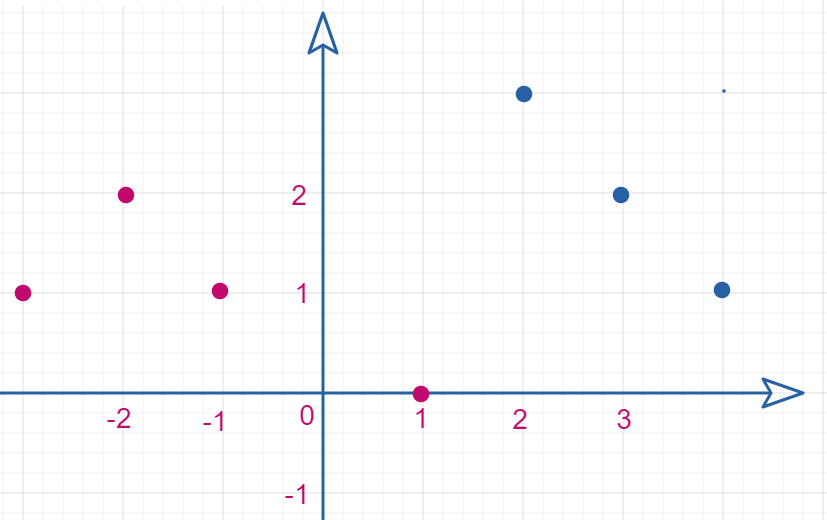
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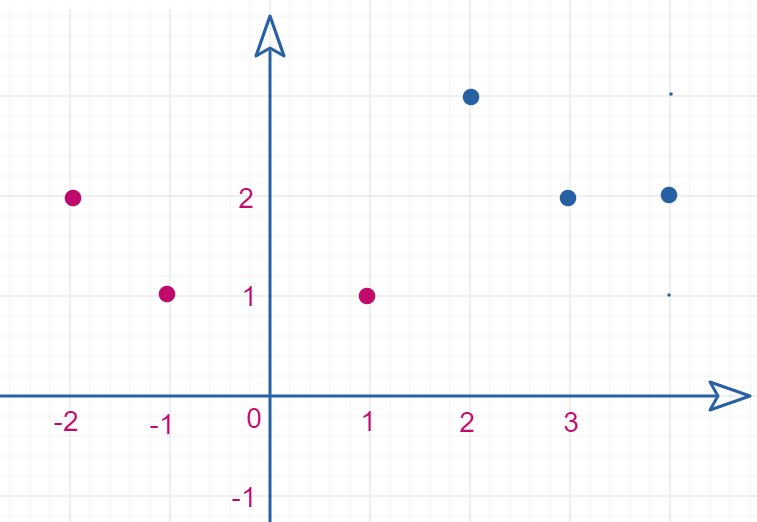
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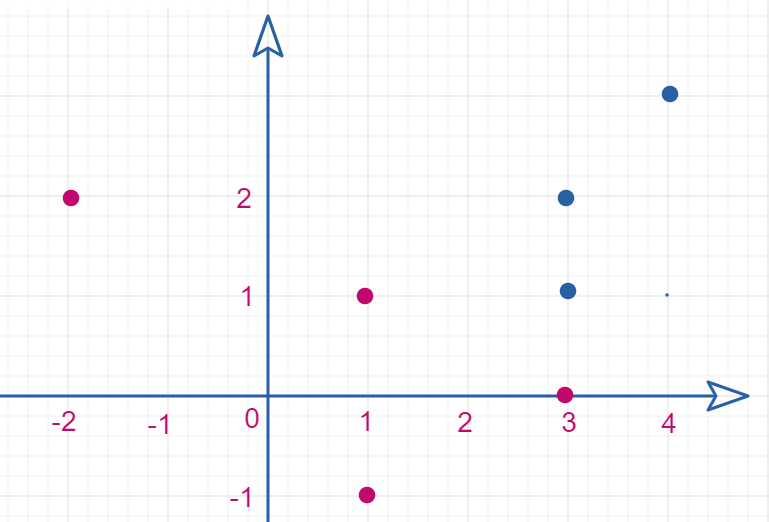
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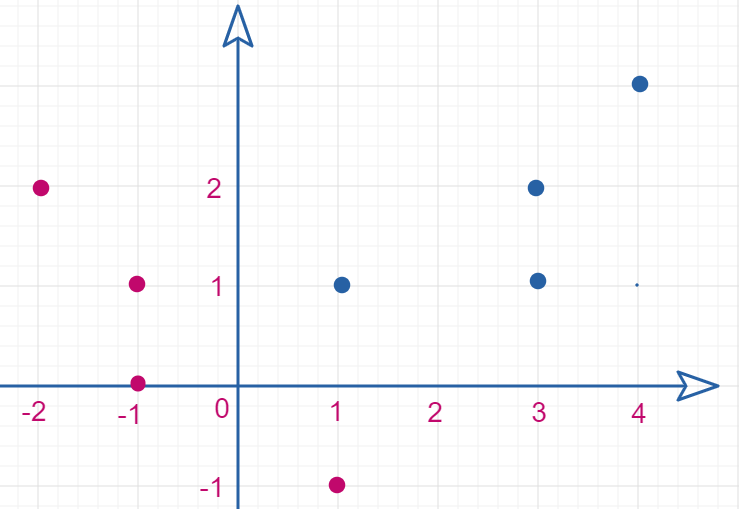
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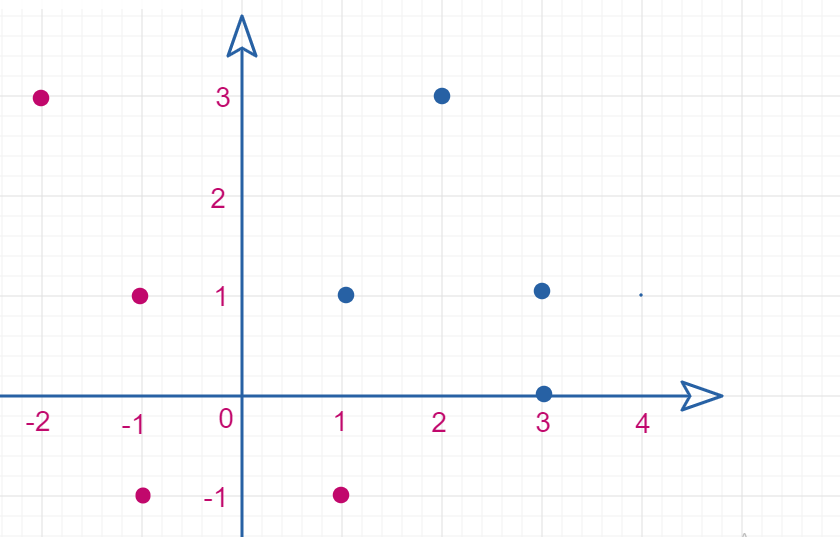
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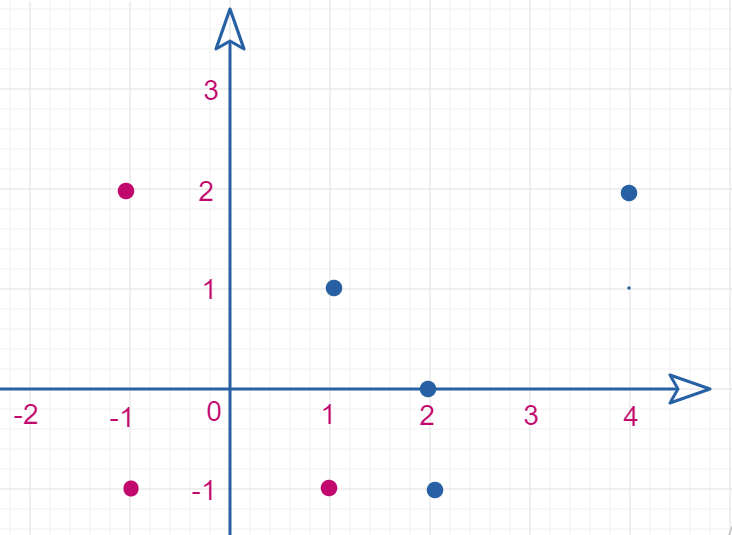
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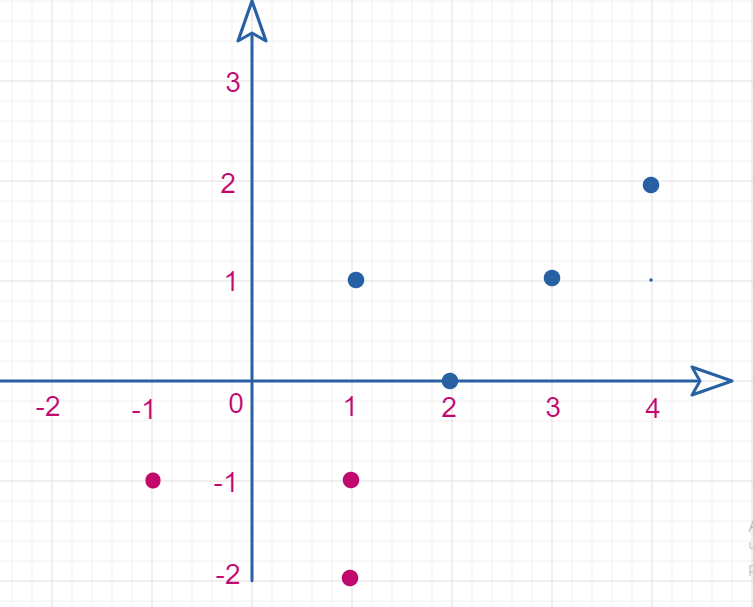
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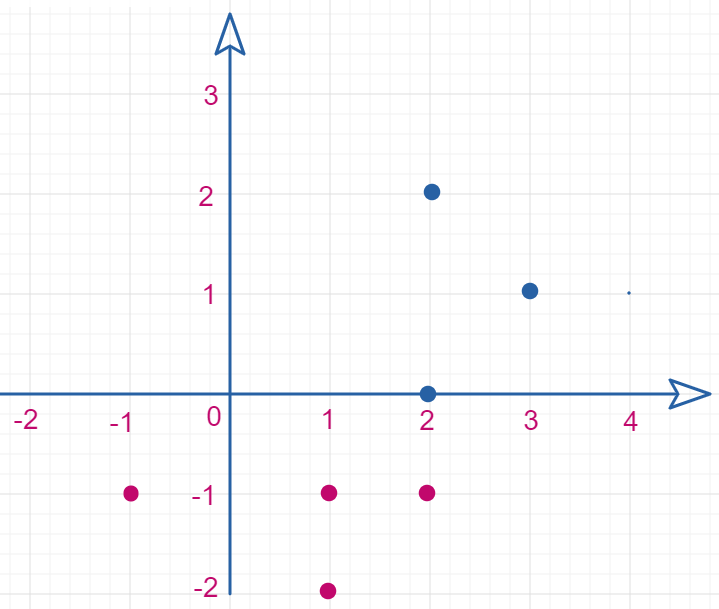
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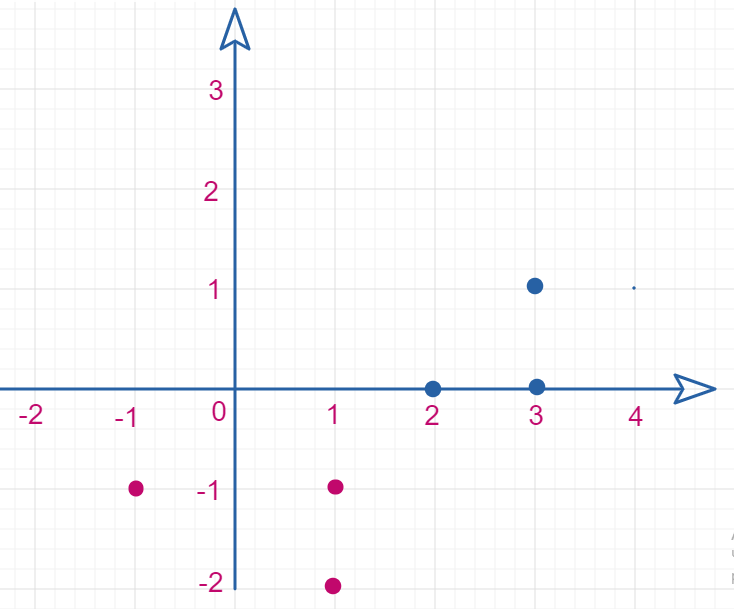
28.



29.



30.



**Task 2.**

Come up with a set of points for a nonlinear SVM algorithm and solve the data classification problem.