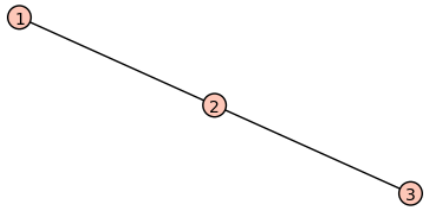
Last name _____

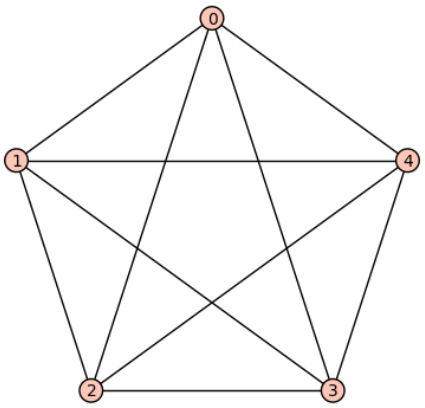
First name _____

LARSON—MATH 356—HOMEWORK WORKSHEET 01

Independent Sets and $maxset(G)$



1. Let G be the above graph. Answer the following questions.
   (a) Find the *set* of vertices V.
   (b) Find the *set* of edges E (remember to use Wilf's pair notation for your edges).
   (c) Find a maximum independent set I of G.
   (d) *Argue* that your set I is maximum (that there *can't* be a larger independent set).
   (e) Find $maxset(G)$.



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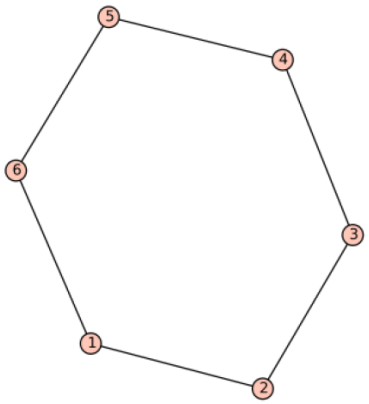

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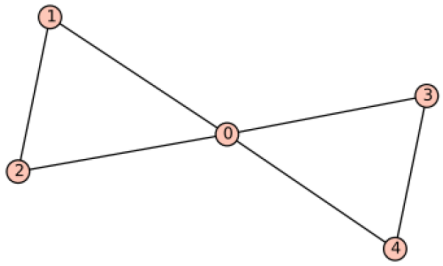

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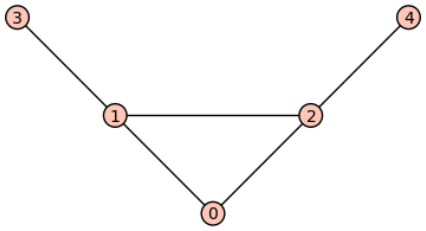

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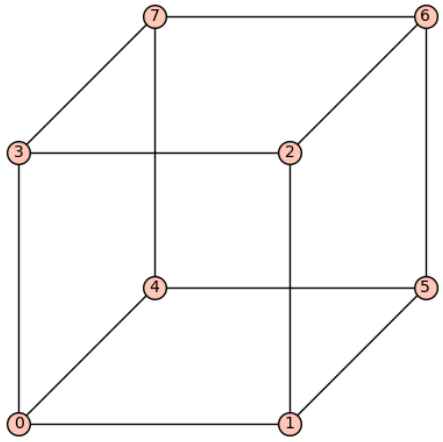

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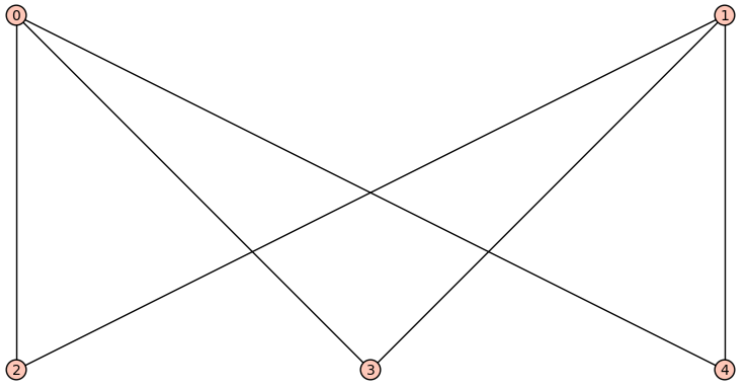

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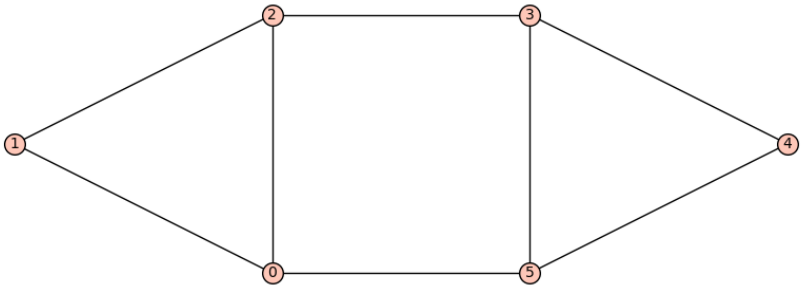

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