



**ACM Competitive Programming @UM6P  
Summer 2024**

***Instructor: R. Abid***

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**Assignment#5:**

***Topic: Dynamic Programming***

*Due date : Mon, Aug 19<sup>th</sup>*

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**Suggested Problems –**

1. 0-1 Knapsack (Super Sale) – UVA#10130
2. Coin Change – UVA#674
3. Wedding Shopping – UVA#11450
4. Binomial Coefficients – UVA#1649
5. LCS (Longest Common Subsequence) – UVA#10405
6. LIS (Longest Increasing Subsequence) – UVA#11499
7. Kadane's Algorithm:
  - 7.1. MAX 1D Range Sum – UVA#507
  - 7.2. MAX 2D Range Sum – UVA#108

**Classical Problems**

- MAX 1D Range Sum – UVA#507
- MAX 2D Range Sum – UVA#108
- LIS (Longest Increasing Subsequence) –

# Exercises / Assignments

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UVA#11499

- [0-1 Knapsack – UVA#10130](#)
- [Coin Change – UVA#674](#)