

# Greedy Algorithm to solve Colote Optimization Problem

#### **Developers:**

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## What do we use?

**Programming Language: C++** 

**IDE: CLion** 

**Approach: Greedy** 

### How does it work?



Repeat this procedure until time (5 seconds) expires, changing the order of destination cells



Check Feasibility



Generate a solution by exploring all the different possibilities for the remaining tasks.

# Some Results

	Opt. Solution	My solution	Error (%)
Co_100_1_NT_4	<b>5270</b>	5272	0.0379507
Co_100_1_NT_9	6493	6511	0.277222
Co_100_1_T_4	5350	5355	0.0934579
Co_100_1_T_2	4636	4671	0.754961
Co_100_20_NT_9	2551	2551	0
Co_100_20_NT_6	2015	2015	0
Co_100_20_T_4	2172	2172	0
Co_100_20_T_0	3662	3663	0.0273075
Co_300_20_NT_11	7638	7638	0
Co_300_20_NT_1	7035	7036	0.0142146

## Some Results

	Opt. Solution	My solution	Error (%)
Co_300_20_T_9	7183	7183	0
Co_300_20_T_1	7045	7048	0.0425834
Co_30_1_NT_7	1032	1032	0
Co_30_1_NT_0	1041	1049	0.768492
Co_30_1_T_7	1394	1394	0
Co_30_1_T_0	1105	1109	0.361991
Co_30_20_NT_0	719	719	0
Co_30_20_NT_5	827	827	0
Co_30_20_T_3	457	457	0
Co_30_20_T_7	991	991	0

**AVERAGE ERROR: 0.0904355** 



# Thank you for the attention!

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