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| Task. No.: | 5 | Points: | 5 | Stacking and destacking |

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| Objectives:  1. Use *seek* command for stacking and destacking applications. 2. Use *thread* command to reduce execution time. 3. Use the *wait* and *set* commands. |

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| Description: The aim of this exercise is to change pick and place program to put several workpieces on the top of each other (stacking). It should wait for the sensor to detect a workpiece on the conveyor and turn off the conveyor to enable the robot picking the workpiece. Three workpieces should be stacked. Then, add destacked application to your program. |

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| Step | Action |
| 1 | Create a variable to count workpieces in each stack and set it to 0 in the *Initial Variable Values*. |
| 2 | Wait for the sensor to detect a workpiece. |
| 3 | Stop the conveyor with *set* command in a thread. |
| 4 | Use *seek* command. Select *stacking* and set its parameters to stack three workpieces. |
| 5 | Use *seek* command again. Select *destacking* and set its parameters to place back the stacked workpieces on the conveyor. |

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