TOBB University of Economics and Technology
Department of Computer Engineering
BIL395 Programming Languages
Instructor: Dr. Osman Abul

Assignment 3
Date due: March 16, 2020

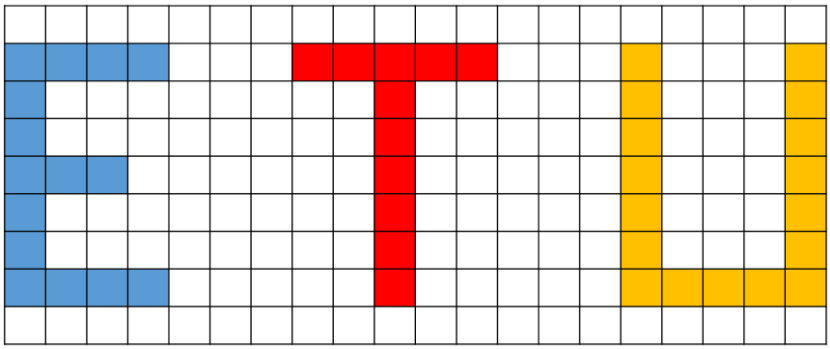
Subject: Extended $\mathcal{P}eakasso$ language

Problem: In this assignment, you are expected to add some language features to $\mathcal{P}eakasso$ language which is described in Assignment 1, and also to implement such extended features into your version of the interpreter.

The extended language features include:

- An iteration statement, either counter controlled or logically controlled.
- A two-way selection statement, i.e., if then else.
- Colored drawing in which brushes have colors in addition to the size. You may pick a set (at least 7 colors) of predefined-colors. Make sure that there is a default color.
- Gridded colored graphics canvas rather than the text canvas. So, instead of outputting "*" symbols to the console, the paint statements fully color the respective cells in the graphics interface.

A sample canvas looks like.



Implementation

Extend your *Peakasso* interpreter accordingly using Javacc.

Delivery

Send your solution, **a single pdf document describing your language design** and **a single Javacc source file implementing it**, to the course assistant Esra at `esranayaz@gmail.com`. An additional readme file is always appreciated.

Important

You may keep the previous team or declare independence if you are unhappy with the teammate in the previous assignment. No new pairing is allowed at this time.

Important++

Avoid cheating.