

REBUTTAL

Q1)Can our compiler detect multiple errors?

Ans: Yes, but we designed our compiler in such a way that it will stop as soon as it encounters the first error.

Q2)How do we recover from an error?

Ans: We haven't handled error recovery. The compiler shows the error to the user and the user itself corrects the error.

Q3)Is the matrix data type similar to multi-dimensional arrays in C?

Ans: We have included specific operations on matrices which add special value to it and differentiates it from multi-dimensional arrays we see in C.

Q4)How do we generate the IR for the matrix?

Ans:For matrices it is rowMajor .

Q5)Does codegen.ml work on any simple program?

Ans: For any program, it is giving segmentation faults.

Q6)Does our compiler have any checks for the out of bound errors which come in case of matrices?

Ans: No.

Q7)How is our compiler smart in the context of providing hints or suggestions to the user for better implementation of the code? We are giving the power to the user(whatever is being written in the file is what the model will be trained on), doesn't it male it more susceptible to the advice given by the user to the program?

Ans: (Concept of Tags) Tags in Tureasy are to be used to identify the parts of code where it can be improved, which could be either in the form of suggestions or corrections over the section of the code they enclose.

More than giving freedom to the users , we plan on pre-training models with some special and command tags by experts before we let it out for the user to have the benefits of this optimization. Moreover, this will be an offline model. This concept of tags is inspired from HTML. In the backend of the compiler, special blocks mark the presence of tag implementation by colouring those special nodes. This would have been implemented successfully if we had passed the codegen phase without a segmentation fault as we are dependent on IR for this implementation.

Q8) What are the additional constructs in our language apart from C?

Ans: Apart from C, we have implemented matrix data structure which serves as an array also in the back end of the compiler. And array data structure isn't in use as per our language. We had plans to implement sets and graphs data types which unfortunately couldn't be accomplished.