Grammar for Project Phase 3 (Translation Scheme)

$Stmt \rightarrow WhileStmt \mid Expr :: \mid IfStmt \mid CompStmt \mid Declaration \mid ::$
$Declaration \rightarrow Type\ IdentList ::$
$Type \rightarrow Adadi \mid Ashriya \mid Harf \mid Matn \mid Mantiqi$
$IdentList \rightarrow identifier, IdentList \mid identifier$
$WhileStmt \rightarrow while\ (\ Expr\ )\ Stmt$
$IfStmt \rightarrow Agar\ (\ Expr\ )\ Stmt\ ElsePart$
$ElsePart \rightarrow Wagarna\ Stmt \mid \Lambda$
$CompStmt \rightarrow \{\ StmtList\ \}$
$StmtList \rightarrow StmtList\ Stmt \mid \Lambda$
$Expr \rightarrow identifier := Expr \mid Rvalue$
$Rvalue \rightarrow Rvalue\ Compare\ Mag \mid Mag$
$Compare \rightarrow == \mid < \mid > \mid <= \mid >= \mid ! = \mid <>$
$Mag \rightarrow Mag + Term \mid Mag - Term \mid Term$
$Term \rightarrow Term * Factor \mid Term / Factor \mid Factor$
$Factor \rightarrow (\ Expr\ ) \mid identifier \mid number$

Output

*.cpp

```
......
_a= _b+_c*_d::
.....
```

C/C++ Code File

Your Designed Compiler@FAST

*.tac

```
......
t1 = _c * _d
t2 = _b + t1
_a = t2
.....
```

Three Address Code