

# BisayaCommuter Language Grammar

```
statements : NEWLINE* statement (NEWLINE+ statement)* NEWLINE*

statement : KEYWORD:SUKLI expr?
           : KEYWORD:UNAHAN
           : KEYWORD:HUNONG
           : expr

expr : KEYWORD:PASA AYDI EQ expr
     : comp-expr ((KEYWORD:UG|KEYWORD:KUN) comp-expr)*

comp-expr : DILI comp-expr
          : arith-expr ((SAKTO|KUWANG|SOBRA|SAKWANG|SAKRA) arith-expr)*

arith-expr : term ((DUGANGI|KWAI) term)*

term : factor ((DAGHANON|BAHINON) factor)*

factor : (DUGANGI|KWAI) factor
       : power

power : call (KAPILAON factor)*

call : atom (WALAPR (expr (COMMA expr)*)? TUOPR)?

atom : PLETE|SINSILYO|TIBUOK|AYDI
     : WALAPR expr TUOPR
     : list-expr
     : if-expr
     : for-expr
     : while-expr
     : func-def

list-expr : LSQUARE (expr (COMMA expr)*)? RSQUARE

if-expr : KEYWORD:KUNG expr KEYWORD:DAYON
        (statement if-expr-b|if-expr-c?)
        | (NEWLINE statements KEYWORD:LUGAR|if-expr-b|if-expr-c)

if-expr-b : KEYWORD:KONDILI expr KEYWORD:DAYON
          (statement if-expr-b|if-expr-c?)
          | (NEWLINE statements KEYWORD:LUGAR|if-expr-b|if-expr-c)

if-expr-c : KEYWORD:KINI
          statement
          | (NEWLINE statements KEYWORD:LUGAR)

*for-expr : KEYWORD:PARA AYDI EQ expr KEYWORD:PADONG expr
          (KEYWORD:SAKA expr)? KEYWORD:DAYON
          statement
          | (NEWLINE statements KEYWORD:LUGAR)

while-expr : KEYWORD:SAMTANG expr KEYWORD:THEN
           statement
```

```
| (NEWLINE statements KEYWORD:LUGAR)

func-def      : KEYWORD: ROTA AYDI
               WALAPR (AYDI (COMMA AYDI)*)? TUOPR
               (ARROW expr)
               | (NEWLINE statements KEYWORD:LUGAR)

input         : PLETE
input_int     : PLETE_KWARTA
print         : SUKLI
```

original	BISAYA
DIGITS	NUMERO
LETTERS	LETRA
LETTER_DIGIT	LETRA_NUMERO

FOR TOKENS

original	BISAYA
INT	KWARTA
FLOAT	SINSILYO
IDENTIFIER	AYDI
KEYWORD	--
PLUS	DUGANG
MINUS	KWAI
MUL	DAGHANON
DIV	BAHIN
POW	KAPILAON
EQ	--
LPAREN	--
RPAREN	--
LSQUARE	--
RSQUARE	--
EE	SAKTO
NE	DISAKTO
LT	KUWANG
GT	SOBRA
LTE	SAKWANG
GTE	SAKRA
COMMA	--
ARROW	--
NEWLINE	SUNOD
EOF	TUMOY

FOR KEYWORDS

original	BISAYA
VAR	PASA
AND	UG
OR	KUN
NOT	DILI

original	BISAYA
IF	KUNG
ELIF	KONDILI
ELSE	KINI
FOR	PARA
TO	PADONG
STEP	SAKA
WHILE	SAMTANG
FUNCTION	ROTA
END	LUGAR
RETURN	BALIK
CONTINUE	UNAHAN
BREAK	HUNONG
THEN	DAYON

## FOR SYMBOL TABLE

original	BISAYA
NULL	WA
FALSE	NGI
TRUE	OO
PRINT	SUKLI
PRINT_RET	SUKLI
INPUT	PLETE
INPUT_INT	PLETE
CLEAR	LIMPYO
IS_NUMERO	NUMERO_BA
IS_STR	TIBUOK_BA
IS_LIST	LINYA_BA
IS_FUNCTION	ROTA_BA
APPEND	PUNO
POP	BUTO
EXTEND	ISWAG
LEN	SUKOD
RUN	LARGA