

Token	Pattern	Purpose
MAIN	Main	the driver function
LBRACE	{	Start of a block
RBRACE	}	End of a block
LPARA	(Start of an argument list
RPARA)	End of an argument list
LSQUARE	[Start of an array indexing
RSQUARE]	End of an array indexing
STRUCT	struct	the keyword for defining structures
COMMENT_ST	@~	Comments
ASCII_CHAR	All ascii characters	ascii for english text
SEMI_CL	;	to denote the end of a statement
ASSIGN_OP	=	for assignment operations
ID	[A-Z a-z] [A-Z a-z _ 0-9]*	identifier
COMMA	,	to separate multiple arguments
NUM	[1-9][0-9]* [0]	integers to represent numbers
RNUM	[0-9]+ "." [0-9]+	Real numbers
BOOLEAN	boolean	True, False
POINT	Point	Inbuilt data type to represent a point
BOT	Bot	Inbuilt data type to represent a robot
VELOCITY	Velocity	Inbuilt data type to represent velocity

COL_ASSIGN	:=	Operator used for assignment of vector, point and bot data types
INT	int	Integer data type
FLOAT	float	Floating point data type
DOT	.	member access data type
COLON	:	Array splicing operator
LOG_OR		Logical OR
LOG_AND	&&	Logical AND
LT	<	less-than comparator
GT	>	greater-than comparator
LOG_EQ	==	Equivalence checking
FUNCTION	function	keyword for defining a function
RETURN	return	keyword to return from a function
LTE	<=	less-than-or-equal-to operator
GTE	>=	greater-than-or-equal-to operator
RT	rt	operator to turn the bot by 90 degrees clockwise
ADDV	addV	Addition operator for Velocities
PL_EQ	+=	Shorthand Plus Equal
TRUE	true	Boolean True value
FALSE	false	Boolean False value
COMMENT_END	~@	End of Comment
INPOP	>>	To read in input from the user

UNARY_INCR	++	Unary increment operator
UNARY_DECR	--	Unary decrement operator
UNDERSC	_	anonymous variable to catch unwanted values
FW	fw	Operator to make the bot move forward

Keywords

Bot	In built data type to represent a bot
Point	In built data type to represent a Point
function	keyword to indicate start of a function definition
Main	Keyword to indicate the main function
void	void data type
int	Integer data type
float	Floating point data type
boolean	Boolean data type
True	Keyword representing boolean True value
False	Keyword representing boolean False value
Velocity	In built data type to represent velocity
readi	In built function to read in data. Always used in conjunction with the >> operator.
return	Keyword to return from a function
break	Keyword to break out of a block
continue	Keyword to continue with an iteration
exit	Inbuilt function to exit from the program
fw	Operator to make the bot move forward

rt	Operator to make the bot turn right
addV	Operator to add 2 Vector types
for	Keyword to indicate the start of an iterative block
if	Keyword to represent the start of a conditional block
else	Keyword to represent the else clause in a conditional block