

Declaration CFG	
$\langle \text{dec} \rangle \rightarrow \text{DT } \langle \text{dec_choice} \rangle$ $\langle \text{dec_choice} \rangle \rightarrow [] \text{ ID } \langle \text{init_arr} \rangle \langle \text{list_arr} \rangle \mid \text{ ID } \langle \text{init} \rangle \langle \text{list} \rangle$ $\langle \text{init} \rangle \rightarrow = \langle \text{OE} \rangle \mid \sim$ $\langle \text{list} \rangle \rightarrow ; \mid , \text{ ID } \langle \text{init} \rangle \langle \text{list} \rangle$ $\langle \text{init_arr} \rangle \rightarrow = \langle \text{init_arr_choice} \rangle \mid \sim$ $\langle \text{init_arr_choice} \rangle \rightarrow \text{new DT} [\langle \text{OE} \rangle] \langle \text{return_choice} \rangle \mid \{ \langle \text{PL} \rangle \} \mid \text{ ID } \mid \sim$ $\langle \text{list_arr} \rangle \rightarrow ; \mid , \text{ ID } \langle \text{init_arr} \rangle \langle \text{list_arr} \rangle$	
First($\langle \text{dec} \rangle$) \rightarrow DT	
First($\langle \text{dec_choice} \rangle$) \rightarrow [, ID	
First($\langle \text{init} \rangle$) \rightarrow = , ~	Follow($\langle \text{init} \rangle$) \rightarrow , , ;
First($\langle \text{list} \rangle$) \rightarrow ; , ,	
First($\langle \text{init_arr} \rangle$) \rightarrow = , ~	Follow($\langle \text{init_arr} \rangle$) \rightarrow , , ;
First($\langle \text{init_arr_choice} \rangle$) \rightarrow new, { , ID , ~	Follow($\langle \text{init_arr_choice} \rangle$) \rightarrow , , ;
First($\langle \text{list_arr} \rangle$) \rightarrow ; , ,	

Object Declaration	
$\langle \text{obj_dec} \rangle \rightarrow \text{ID } \langle \text{obj_dec_choice} \rangle$ $\langle \text{obj_dec_choice} \rangle \rightarrow [] \text{ ID } \langle \text{obj_init_arr} \rangle \langle \text{obj_list_arr} \rangle \mid \text{ ID } \langle \text{obj_init} \rangle \langle \text{obj_list} \rangle$ $\langle \text{obj_init} \rangle \rightarrow = \langle \text{obj_init_choice} \rangle \mid \sim$ $\langle \text{obj_init_choice} \rangle \rightarrow \text{new ID} (\langle \text{PL} \rangle) \mid \langle \text{OE} \rangle$ $\langle \text{obj_list} \rangle \rightarrow ; \mid , \text{ ID } \langle \text{obj_init} \rangle \langle \text{obj_list} \rangle$ $\langle \text{obj_init_arr} \rangle \rightarrow = \langle \text{obj_init_arr_choice} \rangle \mid \sim$ $\langle \text{obj_init_arr_choice} \rangle \rightarrow \text{new ID} [\langle \text{OE} \rangle] \langle \text{return_obj_choice} \rangle \mid \{ \langle \text{PL_dec} \rangle \} \mid \text{ ID } \mid \sim$ $\langle \text{obj_list_arr} \rangle \rightarrow ; \mid , \text{ ID } \langle \text{obj_init_arr} \rangle \langle \text{obj_list_arr} \rangle$	
First($\langle \text{obj_dec} \rangle$) \rightarrow DT	
First($\langle \text{obj_dec_choice} \rangle$) \rightarrow [, ID	
First($\langle \text{obj_init} \rangle$) \rightarrow = , ~	Follow($\langle \text{obj_init} \rangle$) \rightarrow , , ;
First($\langle \text{init_choice} \rangle$) \rightarrow new , int_const, char_const , string_const, float_const, true, false, (, ! , this, ID , inc_dec	
First($\langle \text{obj_list} \rangle$) \rightarrow ; , ,	
First($\langle \text{obj_init_arr} \rangle$) \rightarrow = , ~	Follow($\langle \text{obj_init_arr} \rangle$) \rightarrow , , ;
First($\langle \text{obj_init_arr_choice} \rangle$) \rightarrow new, { , ID , ~	Follow($\langle \text{init_arr_choice} \rangle$) \rightarrow , , ;
First($\langle \text{obj_list_arr} \rangle$) \rightarrow ; , ,	

SST (Single Statement)	
<p> $\langle \text{SST} \rangle \rightarrow \langle \text{if_else} \rangle \mid \langle \text{while_st} \rangle \mid \langle \text{for_st} \rangle \mid \text{inc_dec} \langle \text{this_st} \rangle \text{ ID } \langle \text{X} \rangle ; \mid \text{this . ID } \langle \text{XY_SST} \rangle \mid \text{ID} \langle \text{ZZZ} \rangle \mid \langle \text{try_st} \rangle \mid \text{DT } \langle \text{dec_choice} \rangle \mid \text{continue} ; \mid \text{break} ; \mid ;$ </p> <p> $\langle \text{ZZZ} \rangle \rightarrow \text{ID } \langle \text{obj_init} \rangle \langle \text{obj_list} \rangle \mid [\langle \text{XY_dec} \rangle \mid \langle \text{XY1_SST} \rangle \mid (\langle \text{PL} \rangle) \langle \text{XY2_SST} \rangle$ $\langle \text{XY_dec} \rangle \rightarrow \langle \text{OE} \rangle] \langle \text{XY1_SST} \rangle \mid] \text{ID} \langle \text{obj_init_arr} \rangle \langle \text{obj_list_arr} \rangle$ $\langle \text{XY_SST} \rangle \rightarrow (\langle \text{PL} \rangle) \langle \text{XY2_SST} \rangle \mid . \text{ID } \langle \text{XY_SST} \rangle \mid \text{inc_dec} ; \mid = \langle \text{OE} \rangle ; \mid [\langle \text{OE} \rangle] \langle \text{XY1_SST} \rangle \mid ;$ $\langle \text{XY1_SST} \rangle \rightarrow . \text{ID } \langle \text{XY_SST} \rangle \mid \text{inc_dec} ; \mid = \langle \text{OE} \rangle ;$ $\langle \text{XY2_SST} \rangle \rightarrow . \text{ID } \langle \text{XY_SST} \rangle \mid [\langle \text{OE} \rangle] \langle \text{XY1_SST} \rangle \mid ;$ </p> <p> $\langle \text{MST} \rangle \rightarrow \langle \text{SST} \rangle \langle \text{MST} \rangle \mid \sim$ </p>	
First($\langle \text{SST} \rangle$) \rightarrow if, while, for, try, this, inc_dec, ID, DT, continue, break	
First($\langle \text{ZZZ} \rangle$) \rightarrow ID, (, ., inc_dec, =, [,	
First($\langle \text{XY_dec} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, (, !, this, ID, inc_dec,]	
First($\langle \text{XY_SST} \rangle$) \rightarrow (, ., inc_dec, =, ;, [,	
First($\langle \text{XY1_SST} \rangle$) \rightarrow ., inc_dec, =,	
First($\langle \text{XY2_SST} \rangle$) \rightarrow ., ;, [,	
First($\langle \text{MST} \rangle$) \rightarrow if, while, for, try, this, inc_dec, ID, DT, break, continue, ~	Follow($\langle \text{MST} \rangle$) \rightarrow }

SST1 (Includes return keyword)	
<p> $\langle \text{SST1} \rangle \rightarrow \langle \text{if_else} \rangle \mid \langle \text{while_st} \rangle \mid \langle \text{for_st} \rangle \mid \text{inc_dec} \langle \text{this_st} \rangle \text{ ID } \langle \text{X} \rangle ; \mid \text{this . ID } \langle \text{XY_SST} \rangle \mid \text{ID} \langle \text{ZZZ} \rangle \mid \langle \text{try_st} \rangle \mid \text{DT } \langle \text{dec_choice} \rangle \mid \langle \text{return_st} \rangle \mid ;$ </p> <p> $\langle \text{MST1} \rangle \rightarrow \langle \text{SST1} \rangle \langle \text{MST1} \rangle \mid \sim$ </p>	
First($\langle \text{SST1} \rangle$) \rightarrow if, while, for, try, this, inc_dec, ID, DT, return	
First($\langle \text{MST1} \rangle$) \rightarrow if, while, for, try, this, inc_dec, ID, DT, return, ~	Follow($\langle \text{MST1} \rangle$) \rightarrow }

For Statement	
<pre> <for_st> → for(<c1><c2>;<c3>) { <MST> } <c1> → inc_dec <this_st>ID<X>; DT <dec_choice> this . ID <X><c1_choice2> ID <for_ZZZ> ; <c1_choice2> → = <OE>; inc_dec ; <c2> → <OE> ~ <c3> → <this_st>ID<X> <c3_choice><c3_more_choice> inc_dec <this_st>ID<X><c3_more_choice> new ID(<PL>)<c3_more_choice> ~ <c3_choice> → inc_dec = <OE> <c3_more_choice> → , <c3_must> <c3_more_choice> ~ <c3_must> → <this_st>ID<X> <c3_choice> inc_dec <this_st>ID<X> new ID(<PL>) <for_ZZZ> → ID <obj_init><obj_list> [<XY_dec> <for_XY1_SST> (<PL>)<for_XY2_SST> <for_XY_dec> → <OE>] <for_XY1_SST>] ID<obj_init_arr><obj_list_arr> <for_XY_SST> → (<PL>) <for_XY2_SST> . ID <for_XY_SST> inc_dec; = <OE>; [<OE>] <for_XY1_SST> ; <for_XY1_SST> → . ID <for_XY_SST> inc_dec ; = <OE>; <for_XY2_SST> → . ID <for_XY_SST> [<OE>]<for_XY1_SST> </pre>	
First(<for>) → for	
First(<c1>) → inc_dec, DT,this, ID , ;	
First(<c1_choice2>) → = , inc_dec	
First(<c2>) → int_const, char_const , string_const, float_const, true, false , (, ! , this, ID , inc_dec , ~	Follow(<c2>) → ;
First(<c3>) → this, ID , inc_dec, new , ~	Follow(<c3>) →)
First(<c3_choice>) → inc_dec, =	
First(<c3_more_choice>) → , , ~	Follow(c3_more_choice) →)
First(<c3_must>) → this, ID , inc_dec , new	
First(<for_ZZZ>) → ID, (, . , inc_dec, = , [
First(<for_XY_dec>) → int_const, char_const , string_const, float_const, true, false, (, ! , this, ID , inc_dec,]	
First(<for_XY_SST>) → (, . , inc_dec , = , ; , [
First(<for_XY1_SST>) → . , inc_dec , =	
First(<for_XY2_SST>) → . , [

Return Statement	
$\langle \text{return} \rangle \rightarrow \text{return } \langle \text{either_return} \rangle ;$ $\langle \text{either_return} \rangle \rightarrow \langle \text{OE} \rangle \text{new } \langle \text{return1} \rangle \sim$ $\langle \text{return1} \rangle \rightarrow \text{ID } \langle \text{return2} \rangle \text{DT } [\langle \text{OE} \rangle] \langle \text{return_choice} \rangle$ $\langle \text{return2} \rangle \rightarrow (\langle \text{PL} \rangle) [\langle \text{OE} \rangle] \langle \text{return_obj_choice} \rangle$ $\langle \text{return_obj_choice} \rangle \rightarrow \{ \langle \text{PL_dec} \rangle \} \sim$ $\langle \text{return_choice} \rangle \rightarrow \{ \langle \text{PL} \rangle \} \sim$	
First($\langle \text{return} \rangle$) \rightarrow return	
First($\langle \text{either_return} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, (, !, this, ID, inc_dec, new, ~	Follow($\langle \text{either_return} \rangle$) \rightarrow ;
First($\langle \text{return1} \rangle$) \rightarrow ID, DT	
First($\langle \text{return2} \rangle$) \rightarrow (, [
First($\langle \text{return_obj_choice} \rangle$) \rightarrow {, ~	Follow($\langle \text{return_obj_choice} \rangle$) \rightarrow , , ;
First($\langle \text{return_choice} \rangle$) \rightarrow {, ~	Follow($\langle \text{return_choice} \rangle$) \rightarrow , , ;

PL_dec (Parameter List Declaration)	
$\langle \text{PL_dec} \rangle \rightarrow \text{new ID}(\langle \text{PL} \rangle) \langle \text{PL1_dec} \rangle \langle \text{OE} \rangle \langle \text{PL1_dec} \rangle$ $\langle \text{PL1_dec} \rangle \rightarrow , \langle \text{PL1_choice} \rangle \langle \text{PL1_dec} \rangle \sim$ $\langle \text{PL1_choice} \rangle \rightarrow \text{new ID}(\langle \text{PL} \rangle) \langle \text{OE} \rangle$	
First($\langle \text{PL_dec} \rangle$) \rightarrow new, int_const, char_const, string_const, float_const, true, false, (, !, this, ID, inc_dec	
First($\langle \text{PL1_dec} \rangle$) \rightarrow , , ~	Follow($\langle \text{PL_dec} \rangle$) \rightarrow }
First($\langle \text{PL1_choice} \rangle$) \rightarrow new, int_const, char_const, string_const, float_const, true, false, (, !, this, ID, inc_dec	

PL (Parameter List)	
$\langle \text{PL} \rangle \rightarrow \langle \text{OE} \rangle \langle \text{PL1} \rangle \sim$ $\langle \text{PL1} \rangle \rightarrow , \langle \text{OE} \rangle \langle \text{PL1} \rangle \sim$	
First($\langle \text{PL} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, (, !, this, ID, inc_dec	
First($\langle \text{PL1} \rangle$) \rightarrow , , ~	Follow($\langle \text{PL} \rangle$) \rightarrow) , }

Const (Constants)	
$\langle \text{const} \rangle \rightarrow \text{string_const} \mid \text{int_const} \mid \text{char_const} \mid \text{float_const} \mid \text{true} \mid \text{false}$	
First($\langle \text{const} \rangle$) $\rightarrow \text{string_const}, \text{int_const}, \text{char_const}, \text{float_const}, \text{true}, \text{false}$	

Def (Function Parameter list while defining)	
$\langle \text{def} \rangle \rightarrow \langle \text{ret_type} \rangle \text{ ID } \langle \text{more_def} \rangle \mid \sim$ $\langle \text{more_def} \rangle \rightarrow , \langle \text{ret_type} \rangle \text{ ID } \langle \text{more_def} \rangle \mid \sim$ $\langle \text{ret_type} \rangle \rightarrow \text{DT } \langle \text{ret_choice} \rangle \mid \text{ID } \langle \text{ret_choice} \rangle$ $\langle \text{ret_choice} \rangle \rightarrow [] \mid \sim$	
First($\langle \text{def} \rangle$) $\rightarrow \text{DT}, \text{ID}, \sim$	Follow($\langle \text{def} \rangle$) $\rightarrow)$
First($\langle \text{more_def} \rangle$) $\rightarrow , , \sim$	Follow($\langle \text{more_def} \rangle$) $\rightarrow)$
First($\langle \text{ret_type} \rangle$) $\rightarrow \text{DT}, \text{ID}$	
First($\langle \text{ret_choice} \rangle$) $\rightarrow [, \sim$	Follow($\langle \text{ret_choice} \rangle$) $\rightarrow) , , , \text{ID}$

X (Always end on variable)	
$\langle X \rangle \rightarrow [\langle \text{OE} \rangle] \langle X1 \rangle \mid (\langle \text{PL} \rangle) \langle X2 \rangle \mid . \text{ID} \langle X \rangle \mid \sim$ $\langle X1 \rangle \rightarrow . \text{ID} \langle X \rangle \mid \sim$ $\langle X2 \rangle \rightarrow . \text{ID} \langle X \rangle \mid [\langle \text{OE} \rangle] . \text{ID} \langle X \rangle$	
First($\langle X \rangle$) $\rightarrow [, (, . , \sim$	Follow($\langle X \rangle$) $\rightarrow ; , \text{pm}, \text{rop}, \text{mdm}, \&\&, [[,) ,] , , , \} , = , \text{inc_dec}$
First($\langle X1 \rangle$) $\rightarrow . , \sim$	Follow($\langle X1 \rangle$) $\rightarrow ; , \text{pm}, \text{rop}, \text{mdm}, \&\&, [[,) ,] , , , \} , = , \text{inc_dec}$
First($\langle X2 \rangle$) $\rightarrow . , [$	

OE (Expression)	
$\langle \text{OE} \rangle \rightarrow \langle \text{AE} \rangle \langle \text{OE}' \rangle$ $\langle \text{OE}' \rangle \rightarrow \mid \mid \langle \text{AE} \rangle \langle \text{OE}' \rangle \mid \sim$ $\langle \text{AE} \rangle \rightarrow \langle \text{RE} \rangle \langle \text{AE}' \rangle$ $\langle \text{AE}' \rangle \rightarrow \&\&\langle \text{RE} \rangle \langle \text{AE}' \rangle \mid \sim$ $\langle \text{RE} \rangle \rightarrow \langle \text{PE} \rangle \langle \text{RE}' \rangle$ $\langle \text{RE}' \rangle \rightarrow \text{rop} \langle \text{PE} \rangle \langle \text{RE}' \rangle \mid \sim$ $\langle \text{PE} \rangle \rightarrow \langle \text{ME} \rangle \langle \text{PE}' \rangle$ $\langle \text{PE}' \rangle \rightarrow \text{pm} \langle \text{ME} \rangle \langle \text{PE}' \rangle \mid \sim$ $\langle \text{ME} \rangle \rightarrow \langle \text{F} \rangle \langle \text{ME}' \rangle$ $\langle \text{ME}' \rangle \rightarrow \text{mdm} \langle \text{F} \rangle \langle \text{ME}' \rangle \mid \sim$ $\langle \text{F} \rangle \rightarrow \langle \text{const} \rangle \mid (\langle \text{OE} \rangle) \mid ! \langle \text{F} \rangle \mid \langle \text{this_st} \rangle \text{ID} \langle \text{XY} \rangle \mid \text{inc_dec} \langle \text{this_st} \rangle \text{ID} \langle \text{X} \rangle$ $\langle \text{XY} \rangle \rightarrow [\langle \text{OE} \rangle] \langle \text{XY1} \rangle \mid (\langle \text{PL} \rangle) \langle \text{XY2} \rangle \mid .\text{ID} \langle \text{XY} \rangle \mid \text{inc_dec} \mid \sim$ $\langle \text{XY1} \rangle \rightarrow .\text{ID} \langle \text{XY} \rangle \mid \text{inc_dec} \mid \sim$ $\langle \text{XY2} \rangle \rightarrow .\text{ID} \langle \text{XY} \rangle \mid [\langle \text{OE} \rangle] \langle \text{XY1} \rangle \mid \sim$	
First($\langle \text{OE} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, bool, var, (, !, this, ID, inc_dec	
First($\langle \text{OE}' \rangle$) \rightarrow $\mid \mid, \sim$	Follow($\langle \text{OE}' \rangle$) \rightarrow), },], , , , ;
First($\langle \text{AE} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, bool, var, (, !, this, ID, inc_dec	
First($\langle \text{AE}' \rangle$) \rightarrow $\&\&, \sim$	Follow($\langle \text{AE}' \rangle$) \rightarrow $\mid \mid,), },], , , , ;$
First($\langle \text{RE} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, bool, var, (, !, this, ID, inc_dec	
First($\langle \text{RE}' \rangle$) \rightarrow rop, \sim	Follow($\langle \text{RE}' \rangle$) \rightarrow $\&\&, \mid \mid,), },], , , , ;$
First($\langle \text{PE} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, bool, var, (, !, this, ID, inc_dec	
First($\langle \text{PE}' \rangle$) \rightarrow pm, \sim	Follow($\langle \text{PE}' \rangle$) \rightarrow rop, $\&\&, \mid \mid,), },], , , , ;$
First($\langle \text{ME} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, bool, var, (, !, this, ID, inc_dec	
First($\langle \text{ME}' \rangle$) \rightarrow mdm, \sim	Follow($\langle \text{ME}' \rangle$) \rightarrow pm, rop, $\&\&, \mid \mid,), },], , , , ;$
First($\langle \text{F} \rangle$) \rightarrow int_const, char_const, string_const, float_const, true, false, bool, var, (, !, this, ID, inc_dec	Follow($\langle \text{F} \rangle$) \rightarrow mdm, pm, rop, $\&\&, \mid \mid,), },], , , , ;$
First($\langle \text{XY} \rangle$) \rightarrow [, (, ., inc_dec, \sim	Follow($\langle \text{XY} \rangle$) \rightarrow mdm, pm, rop, $\&\&, \mid \mid,), },], , , , ;$
First($\langle \text{XY1} \rangle$) \rightarrow ., inc_dec, \sim	Follow($\langle \text{XY1} \rangle$) \rightarrow mdm, pm, rop, $\&\&, \mid \mid,), },], , , , ;$
First($\langle \text{XY2} \rangle$) \rightarrow ., [, \sim	Follow($\langle \text{XY2} \rangle$) \rightarrow mdm, pm, rop, $\&\&, \mid \mid,), },], , , , ;$

Class Statement	
$\langle \text{class_st} \rangle \rightarrow \langle \text{class_choice} \rangle \langle \text{class_def} \rangle$ $\langle \text{class_def} \rangle \rightarrow \text{class ID} \langle \text{inhrt} \rangle \{ \langle \text{CB} \rangle \}$ $\langle \text{class_choice} \rangle \rightarrow \text{static} \mid \text{abstract} \mid \text{final} \mid \sim$ $\langle \text{inhrt} \rangle \rightarrow \text{extends ID} \langle \text{inhrt_choice} \rangle \mid \sim$ $\langle \text{inhrt_choice} \rangle \rightarrow , \text{ID} \langle \text{inhrt_choice} \rangle \mid \sim$ $\langle \text{CB} \rangle \rightarrow \text{static} \langle \text{CB_Class} \rangle \mid \langle \text{access_modifiers} \rangle \langle \text{static_choice} \rangle \langle \text{CB1} \rangle \mid \langle \text{CB1} \rangle \mid \text{abstract}$ $\langle \text{class_def} \rangle \langle \text{CB} \rangle \mid \text{final} \langle \text{class_def} \rangle \langle \text{CB} \rangle \mid \langle \text{class_def} \rangle \langle \text{CB} \rangle \mid \sim$ $\langle \text{CB_Class} \rangle \rightarrow \langle \text{acc_choice} \rangle \langle \text{CB1} \rangle \mid \langle \text{class_def} \rangle \langle \text{CB} \rangle$ $\langle \text{acc_choice} \rangle \rightarrow \langle \text{access_modifiers} \rangle \mid \sim$ $\langle \text{static_choice} \rangle \rightarrow \text{static} \mid \sim$ $\langle \text{CB1} \rangle \rightarrow \text{DT} \langle \text{fn1} \rangle \langle \text{CB} \rangle \mid \text{void} \langle \text{func} \rangle \langle \text{CB} \rangle \mid \text{ID} \langle \text{fn2} \rangle \langle \text{CB} \rangle$ $\langle \text{fn1} \rangle \rightarrow \text{ID} \langle \text{fn_simple} \rangle \mid [] \text{ID} \langle \text{fn_arr} \rangle$ $\langle \text{fn_simple} \rangle \rightarrow (\langle \text{def} \rangle) \{ \langle \text{MST1} \rangle \} \mid \langle \text{init} \rangle \langle \text{list} \rangle$ $\langle \text{fn_arr} \rangle \rightarrow (\langle \text{def} \rangle) \{ \langle \text{MST} \rangle \} \mid \langle \text{init_arr} \rangle \langle \text{list_arr} \rangle$ $\langle \text{fn2} \rangle \rightarrow \text{ID} \langle \text{fn2_simple} \rangle \mid [] \text{ID} \langle \text{fn2_arr} \rangle \mid (\langle \text{def} \rangle) \{ \langle \text{MST1} \rangle \}$ $\langle \text{fn2_simple} \rangle \rightarrow (\langle \text{def} \rangle) \{ \langle \text{MST1} \rangle \} \mid \langle \text{obj_init} \rangle \langle \text{obj_list} \rangle$ $\langle \text{fn2_arr} \rangle \rightarrow (\langle \text{def} \rangle) \{ \langle \text{MST} \rangle \} \mid \langle \text{obj_init_arr} \rangle \langle \text{obj_list_arr} \rangle$	
First($\langle \text{class_st} \rangle$) \rightarrow static, abstract, final, class	Follow($\langle \text{class_st} \rangle$) \rightarrow static, abstract, final, class, }
First($\langle \text{class_def} \rangle$) \rightarrow class	
First($\langle \text{class_choice} \rangle$) \rightarrow static, abstract, final, ~	Follow($\langle \text{class_choice} \rangle$) \rightarrow class
First($\langle \text{inhrt} \rangle$) -- \rightarrow extends, ~	Follow($\langle \text{inhrt} \rangle$) \rightarrow {
First($\langle \text{inhrt_choice} \rangle$) \rightarrow , , ~	Follow($\langle \text{inhrt_choice} \rangle$) \rightarrow {
First($\langle \text{CB} \rangle$) \rightarrow static, public, protected, private, DT, void, ID, abstract, final, class~	Follow($\langle \text{CB} \rangle$) \rightarrow }
First($\langle \text{acc_choice} \rangle$) \rightarrow public, protected, private, ~	Follow($\langle \text{acc_choice} \rangle$) \rightarrow DT, ID, void
First($\langle \text{static_choice} \rangle$) \rightarrow static, ~	Follow($\langle \text{static_choice} \rangle$) \rightarrow DT, ID, void
First($\langle \text{CB1} \rangle$) \rightarrow DT, void, ID	
First($\langle \text{fn1} \rangle$) \rightarrow ID, [
First($\langle \text{fn_simple} \rangle$) \rightarrow (, =, , , , ;	
First($\langle \text{fn_arr} \rangle$) \rightarrow (, =, , , , ,	
First($\langle \text{fn2} \rangle$) \rightarrow ID, [, (
First($\langle \text{fn2_simple} \rangle$) \rightarrow (, =, , , , ;	
First($\langle \text{fn2_arr} \rangle$) \rightarrow (, =, , , , , ;	

This_st (This Statement)	
<this_st> → this . ~	
First(<this_st>) → this , ~	Follow(<this_st>) → ID

Try_st (Try Catch Finally Statement)	
<try_st> → try { <MST> } <catch_st><finally_st> <catch_st> → catch(ID ID) { <MST> } <catch_st1> <catch_st1> → <catch_st><catch_st1> ~ <finally_st> → finally {<MST>} ~	
First(<try>) → try	
First(<catch_st>) → catch	Follow(<MST1>) → }
First(<catch_st1>) → catch, ~	Follow(<catch_st1>) → if, while, for , try, this, inc_dec, ID ,DT , continue, break, return, } , finally
First(<finally_st>) → finally , ~	Follow(<catch_st1>) → if, while, for , try, this, inc_dec, ID ,DT , continue, break, return, }

Access Modifiers	
<access_modifiers > → public private protected	
First(<access_modifiers>) → public , private , protected	

Func (Function)	
<func> → ID(<def>) { <MST1> }	
First(<func>) → ID	

Class Repeation	
<class_rep> → <class_st> <class_rep> ~	
First(<class_rep>) → static, abstract, final , class , ~	Follow(<class_rep>) → }

Starting	
<S> → namespace ID { <class_rep> }	
First(<S>) → namespace	Follow(<S>) → \$

While_st (While Loop)	
<while_st> → while(<OE>) {<MST>}	
First(<while_st>) → while	

If_else (If Else)	
<if_else> → if (<OE>) { <MST> } <o_else> <o_else> → else <if_choice> ~ <if_choice> → <if_else> { <MST> }	
First(<if_else>) → if	
First(<o_else>) → else , ~	Follow(<o_else>) → if, while , for , try, this, inc_dec , ID ,DT, continue, break , return , }
First(<if_choice>) → if , {	