

```
package UNPA.Winform.Compiladores;
```

```
public class while project{    public  
static void main(String []args){  
    int x=1;  
while(x<=4){  
    system.out.println("valor de x:"+x);  
    x++;  
    }  
    }  
}
```

```
ID={project,main,string,args,x}
```

```
OPREL= {>=}
```

```
OPARI={+}
```

```
OPASI={=}
```

```
OPESP={{},{},(,),,;}
```

```
PALRE={package,public,class,static,void,while,int}
```

```
OPIND={++}
```

```
ERROR=ERROR
```

```
P={S->PKG
```

```
    PKG = PALRE ID PKGR
```

```
    PKGR    -> OPESP CLASS
```

```
    CLASS    -> PALRE PALRE CLASSR
```

```
    CLASSR    -> ID OPESP METHOD
```

```
    METHOD    -> PALRE PALRE METHODR
```

```
    METHODR    -> PALRE METHODRDR
```

```
    METHODRDR -> ID OPESP MAIN
```

MAIN -> PALRE OPESP MAINR
 MAINR -> OPESP ID MAINRDR
 MAINRDR -> OPESP OPESP INICOD
 INICOD -> PALRE ID INICODR
 INICODR -> OPASI DIGIT
 DIGIT -> DIGIT DELIMIT
 DELIMIT -> OPESP WHILE
 WHILE -> PALRE OPESP WHILER
 WHILER -> ID WHILERDR
 WHILERDR -> OPREL DIGIT
 DIGIT -> DIGIT OPESP WHILECONT
 WHILECONT -> OPESP PALRE PRINT
 PRINT -> OPESP OPESP CADENA
 CADENA -> CADENA MAS
 MAS -> OPARI ID PRINTR
 PRINTR -> OPESP OPESP INCREMENT
 INCREMENT -> ID INCREMENTR
 INCREMENTR-> OPIND OPES CIERRE
 CIERRE -> OPESP OPESP OPESP

}

P={S->PKG

Package ID PKGR

Package compiladores PKGR

Package compiladores ; CLASS

Package compiladores ; public PALRE

Pakage compiladores ; public class CLASSR

Pakage compiladores ; public class while ID OPESP MAIN
Pakage compiladores ; public class while project { MAIN

Pakage compiladores ; public class while project { public PALRE OPESP

Pakage compiladores ; public class while project { public static OPESP

Pakage compiladores ; public class while project { public static void METHODR

Pakage compiladores ; public class while project { public static void main OPESP MAIN

Pakage compiladores ; public class while project { public static void main (string OPESP MAINR

Pakage compiladores ; public class while project { public static void main (string [MAINR

Pakage compiladores ; public class while project { public static void main (string [] ID MAINRDR

Pakage compiladores ; public class while project { public static void main (string [] args MAINRDR

Pakage compiladores ; public class while project { public static void main (string [] args)OPESP
INICOD

Pakage compiladores ; public class while project { public static void main (string [] args){INICOD

Pakage compiladores ; public class while project { public static void main (string [] args){ int
ID INICODR

Pakage compiladores ; public class while project { public static void main (string [] args){ int X
INICODR

Pakage compiladores ; public class while project { public static void main (string [] args){ int X =
DIGIT

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1
DELIMIT

Pakage compiladores ; public class while project { public static void main (string [] args){ int X =
1; WHILE

Pakage compiladores ; public class while project { public static void main (string [] args){ int X =
1; while OPESP WHILER

Pakage compiladores ; public class while project { public static void main (string [] args){ int X =
1; while (WHILER

Pakage compiladores ; public class while project { public static void main (string [] args){ int X =
1; while (X WHILERDR

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1; while (X <= DIGIT

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1; while (X <= 4 OPESP WHILECONT

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1; while (X <= 4)WHILECONT

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1; while (X <= 4){PALRE PRINT

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1; while (X <= 4){ println OPESP OPESP

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1; while (X <= 4){ println (OPESP

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1; while (X <= 4){ println (" CADENA

Pakage compiladores ; public class while project { public static void main (string [] args){ int X = 1; while (X <= 4){ println ("VALOR DE X; MAS

1er caso de error

P={S->PKG

PKG = PALRE ID PKGR

PKGR -> OPESP CLASS

CLASS -> PALRE PALRE CLASSR

CLASSR -> ID OPESP METHOD

METHOD -> PALRE PALRE METHODR

METHODR -> PALRE METHODRDR

METHODRDR -> ID OPESP MAIN

MAIN -> PALRE OPESP MAINR

MAINR -> OPESP ID MAINRDR

MAINRDR -> OPESP OPESP INICOD

INICOD -> PALRE ID INICODR

INICODR -> OPASI DIGIT
 DIGIT -> DIGIT DELIMIT
 DELIMIT -> OPESP WHILE
 WHILE -> PALRE OPESP WHILER
 WHILER -> ID WHILERDR
 WHILERDR -> OPREL DIGIT
 DIGIT -> DIGIT OPESP WHILECONT
 WHILECONT -> OPESP PALRE PRINT
 PRINT -> OPESP OPESP CADENA
 CADENA -> CADENA MAS
 MAS -> OPARI ID PRINTR
 PRINTR -> OPESP OPESP INCREMENT
 INCREMENT -> ID INCREMENTR
 INCREMENTR-> OPIND OPES CIERRE
 CIERRE -> OPESP OPESP OPESP

}

2do caso de error

$P=\{S \rightarrow PKG$

PKG = PALRE ID PKGR
 PKGR -> OPESP CLASS
 CLASS -> PALRE PALRE CLASSR
 CLASSR -> ID OPESP METHOD
 METHOD -> PALRE PALRE METHODR
 METHODR -> PALRE METHODRDR
 METHODRDR -> ID OPESP MAIN

MAIN -> PALRE OPESP MAINR

MAINR -> OPESP ID MAINRDR

MAINRDR -> OPESP OPESP INICOD

INICOMODO -> ERROR

}