PL/0 Compiler Example Errors

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# 1: Using semicolon instead of period

|  |
| --- |
| var z,a, b;  begin  a := 0;  b:= 8;  z:=0;  while b > 0 do  begin  if odd b then  z := z + a;  a := 2\*a;  b := b/2;  end  end; |

Message generated:

Error: Line:0, Collumn:1 :: Invalid symbol

# 2: Using : instead of :=

|  |
| --- |
| var w,q, w, r, y;  read x;  read r;  read y;  begin  r := 0;  q := 1;  w : 1;  while w <= r do  w := 2\*w;  while w > y do  begin  q := 2\*q;  w := w/2;  if w =r then  begin  r := r-w;  q := q+1;  end  end  end. |

Message generated:

Error: Line:10, Collumn:2 :: Invalid symbol

# 3: Var declaration missing identifier after

|  |
| --- |
| const a = 1, c = 3;  var ;  begin  b := 2 + a;  write b;  end. |

Message generated:

Error: Line:3, Collumn:2 :: const, var, and procedure must be followed by an identifier

# 4: Var declaration twice

|  |
| --- |
| const a = 1;  var b;  var c;  begin  b := 2 + a;  c := 2 + a;  write b;  end. |

Message generated:

Error: Line:4, Collumn:1 :: var detected more than once

# 5: Constant declaration without number

|  |
| --- |
| const n = ;  var i,h;  procedure sub;  const k = 7;  var j,h;  begin  j:=n;  i:=1;  h:=k;  end;  begin  i:=3;  h:=0;  call sub;  end. |

Message generated:

Error: Line:2, Collumn:4 :: Number expected after = with const

# 6: Var declaration missing variable name

|  |
| --- |
| const n = 8 ;  var ,h;  procedure sub;  const k = 7;  var j,h;  begin  j:=n;  i:=1;  h:=k;  end;  begin  i:=3;  h:=0;  call sub;  end. |

Message generated:

Error: Line:2, Collumn:2 :: const, var, and procedure must be followed by an identifier

# 7: Missing identifier before :=

|  |
| --- |
| var x, w;  begin  := 4;  read w;  if w > x then  write w;  if x > w then  write x;  end. |

Message generated:

Error: Line:4, Collumn:1 :: Cannot begin statement with this symbol

# 8: Missing := after variable

|  |
| --- |
| var x, w;  begin  x 4;  read w;    if w > x then  write w;  if x > w then  write x;  end. |

Message generated:

Error: Line:4, Collumn:2 :: := expected after identifier

# 9: Missing if before condition

|  |
| --- |
| var x, w;  begin  x := 4;  read w;  w > x then  write w;  if x > w then  write x;  end. |

Message generated:

Error: Line:7, Collumn:2 :: := expected after identifier

# 10: Call without identifier

|  |
| --- |
| Const n = 13;  var i,h;  procedure sub;  const k = 7;  var j,h;  begin  j:=n;  i:=1;  h:=k;  end;  begin  i:=3;  h:=0;  call ;  end. |

Message generated:

Error: Line:14, Collumn:2 :: Ident expected after call