KeyDefs: DEFINITIONS = BEGIN
  
updown: TYPE = {down, up};

KeyArray: TYPE = ARRAY [0..5] OF WORD;

KeyBits: TYPE = MACHINE DEPENDENT RECORD [
  blank: [0..377B],
  Keyset1,Keyset2,Keyset3,Keyset4,Keyset5: updown,
  Red,Blue,Yellow: updown,
  Five,Four,Six,E,Seven,D,U,V,
  Zero,K,Dash,P,Slash,BackSlash,LF,BS: updown,
  Three,Two,W,Q,S,A,Nine,I,
  X,O,L,Comma,Quote,RightBracket,Spare2,Spare1: updown,
  One,ESC,TAB,F,Ctrl,C,J,B,
  Z,LeftShift,Period,SemiColon,Return,Arrow,DEL,FL3: updown,
  R,T,G,Y,H,Eight,N,M,
  Lock,Space,LeftBracket,Equal,RightShift,Spare3,FL4,FR5: updown];

Keys: POINTER TO KeyBits = LOOPHOLE[177033B];

MouseButton: TYPE = {RedYellowBlue, RedBlue, RedYellow, Red, BlueYellow, Blue, Yellow, None};

MouseBits: TYPE = MACHINE DEPENDENT RECORD [
  blank: [0..377B], -- Diablo, Versatec, etc.
  keyset: [0..37B], -- 0 => down, i.e. normal state is 37B
  buttons: MouseButton} -- 0=> down, normal is 7B = MouseButton[None]

Mouse: POINTER TO MouseBits = LOOPHOLE[Keys];

KeyName: TYPE = {
  x0, x1, x2, x3, x4, x5, x6, x7,
  Keyset1,Keyset2,Keyset3,Keyset4,Keyset5,
  Red,Blue,Yellow,
  Five,Four,Six,E,Seven,D,U,V,
  Zero,K,Dash,P,Slash,BackSlash,LF,BS,
  Three,Two,W,Q,S,A,Nine,I,
  X,O,L,Comma,Quote,RightBracket,Spare2,Spare1,
  One,ESC,TAB,F,Ctrl,C,J,B,
  Z,LeftShift,Period,SemiColon,Return,Arrow,DEL,FL3,
  R,T,G,Y,H,Eight,N,M,
  Lock,Space,LeftBracket,Equal,RightShift,Spare3,FL4,FR5};

-- Alto II names for some keys can be different

FL1: KeyName = DEL;
FL2: KeyName = LF;
BW: KeyName = Spare1;
FR1: KeyName = Spare3;
FR2: KeyName = Backslash;
FR3: KeyName = Arrow;
FR4: KeyName = Spare2;

KeyItem: TYPE = RECORD [
  Letter: BOOLEAN,
  ShiftCode: [0..177B],
  NormalCode: [0..377B]]; 

ChangeKey: PROCEDURE [key: KeyName, action: KeyItem] RETURNS [oldAction: KeyItem];

END.