

```

%eden
include("board.e");

%scout
point arOrg, arOff;
string ar1, ar2, ar3, ar4, ar5;
arOrg = {10,60};
arOff = {0, 2.r};

# arrivals board

window arTitle, arWin1, arWin2, arWin3, arWin4, arWin5;
arTitle = {
    string: "Arrivals",
    frame: ([arOrg, 1, 30])
};
arWin1 = {
    string: ar1,
    frame: ([arTitle.frame.1.nw + arOff, 1, 30]),
    border: 1
};
arWin2 = {
    string: ar2,
    frame: ([arWin1.frame.1.nw + arOff, 1, 30]),
    border: 1
};
arWin3 = {
    string: ar3,
    frame: ([arWin2.frame.1.nw + arOff, 1, 30]),
    border: 1
};
arWin4 = {
    string: ar4,
    frame: ([arWin3.frame.1.nw + arOff, 1, 30]),
    border: 1
};
arWin5 = {
    string: ar5,
    frame: ([arWin4.frame.1.nw + arOff, 1, 30]),
    border: 1
};
display dispArrive;
dispArrive = < arTitle / arWin1 / arWin2 / arWin3 / arWin4 / arWin5 >

%eden
arListLen is arList#;
ar5 is arList[arListLen];
ar4 is arList[arListLen - 1];
ar3 is arList[arListLen - 2];
ar2 is arList[arListLen - 3];
ar1 is arList[arListLen - 4];

%scout
point deOrg, deOff;
string de1, de2, de3, de4, de5;
deOrg = arOrg + {35.c, 0};
deOff = {0, 2.r};

# departures board

window deTitle, deWin1, deWin2, deWin3, deWin4, deWin5;
deTitle = {
    string: "Departures",
    frame: ([deOrg, 1, 30])
};
deWin1 = {

```

```
        string: de1,
        frame: ([deTitle.frame.1.nw + deOff, 1, 30]),
        border: 1
    };
    deWin2 = {
        string: de2,
        frame: ([deWin1.frame.1.nw + deOff, 1, 30]),
        border: 1
    };
    deWin3 = {
        string: de3,
        frame: ([deWin2.frame.1.nw + deOff, 1, 30]),
        border: 1
    };
    deWin4 = {
        string: de4,
        frame: ([deWin3.frame.1.nw + deOff, 1, 30]),
        border: 1
    };
    deWin5 = {
        string: de5,
        frame: ([deWin4.frame.1.nw + deOff, 1, 30]),
        border: 1
    };
    display dispDepart;
    dispDepart = < deTitle / deWin1 / deWin2 / deWin3 / deWin4 / deWin5 >;
%eden
deListLen is deList#;
de5 is deList[deListLen];
de4 is deList[deListLen - 1];
de3 is deList[deListLen - 2];
de2 is deList[deListLen - 3];
de1 is deList[deListLen - 4];
%scout
screen = dispArrive & dispDepart;
```

```
include("schedule.e");

/* initialise variables */
arList = [ "", "", "", "", "" ];
deList = [ "", "", "", "", "" ];
sep = " ";

/* show next scheduled train */
proc show_train {
    switch (schedule[1][1]) {
        case 0: {
            /* through train */
            append arList, (schedule[1][2] // sep // str(schedule[1][4]));
            append deList, (schedule[1][3] // sep // str(schedule[1][5]));
            break;
        }
        case 1: {
            /* train terminating */
            append arList, (schedule[1][2] // sep // str(schedule[1][3])) // sep // "<
            break;
        }
        case 2: {
            /* train starting */
            append deList, (schedule[1][2] // sep // str(schedule[1][3])) // sep // "<
            break;
        }
    }
    shift schedule;
}

/* train arrived - information removed from arrivals board */
proc arrived {
    delete arList, 6;
}

/* train departed - information removed from departures board */
proc departed {
    delete deList, 6;
}
```



```
schedule = [
[0, "WOLVERHAMPTON", "CHESTER", 1040, 1050, 2],
[1, "MANCHESTER", 1042, 5],
[0, "CHESTER", "WOLVERHAMPTON", 1050, 1055, 3],
[2, "SWANSEA", 1050, 4],
[0, "ELSEMERE", "ABERCWMROY", 1058, 1104, 2],
[0, "MANCHESTER", "CARDIFF", 1126, 1130, 3],
[2, "EUSTON", 1137, 4],
[0, "CARDIFF", "MANCHESTER", 1138, 1140, 2],
[0, "EUSTON", "PWLLHELI", 1142, 1145, 4],
[0, "CHESTER", "WOLVERHAMPTON", 1150, 1152, 2],
[0, "SWANSEA", "CREWE", 1150, 1155, 3],
[0, "ABERYSTWYTH", "BIRMINGHAM", 1200, 1203, 4],
[0, "MANCHESTER", "CARDIFF", 1226, 1230, 4]
];

/* train schedule :
*      field 1 -      0 = through train
*                      1 = train terminates
*                      2 = train starts
*
*      if through train then
*      field 2 -      where train has come from
*      field 3 -      where train is going to
*      field 4 -      arrival time
*      field 5 -      departure time
*      field 6 -      platform
*
*      if train terminates (train starts) then
*      field 2 -      where train has come from (going to)
*      field 3 -      arrival time (departure time)
*      field 4 -      platform
*/
```

