

[Help](#)

```

#if defined(PremiaCurrentVersion) && PremiaCurrentVersion < (2008+2) //The "#els
#else
/*****
/*                                     highdim_vector.h
*****/
/*                                     */
/* type VECTOR                        */
/*                                     */
/* Copyright (C) 1992-1995 Tomas Skalicky. All rights reserved. */
/*                                     */
/*****
/*                                     */
/*      ANY USE OF THIS CODE CONSTITUTES ACCEPTANCE OF THE TERMS */
/*      OF THE COPYRIGHT NOTICE (SEE FILE COPYRGHT.H)             */
/*                                     */
*****/

#ifndef HIGHDIM_VECTOR_H
#define HIGHDIM_VECTOR_H

#include <stdlib.h>

#include "lastypes.h"
#include "elcmp.h"
#include "copyrght.h"

typedef struct
{
    char *Name;
    size_t Dim;
    InstanceType Instance;
    int LockLevel;
    double Multipl;
    Boolean OwnData;
    double *Cmp;
} Vector;

void V_Constr(Vector *V, char *Name, size_t Dim, InstanceType Instance,
              Boolean OwnData);

```

```
void V_Destr(Vector *V);
void V_SetName(Vector *V, char *Name);
char *V_GetName(Vector *V);
size_t V_GetDim(Vector *V);
void V_SetCmp(Vector *V, size_t Ind, double Val);
void V_SetAllCmp(Vector *V, double Val);
void V_SetRndCmp(Vector *V);
double V_GetCmp(Vector *V, size_t Ind);
void V_AddCmp(Vector *V, size_t Ind, double Val);

/* macros for fast access */
#define V__SetCmp(PtrV, Ind, Val) (PtrV)->Cmp[Ind] = (Val)
#define V__GetCmp(PtrV, Ind) (PtrV)->Cmp[Ind]
#define V__AddCmp(PtrV, Ind, Val) (PtrV)->Cmp[Ind] += (Val)

void V_Lock(Vector *V);
void V_Unlock(Vector *V);

#endif /* HIGHDIM_VECTOR_H */

#endif //PremiaCurrentVersion
```