

(enum)

```
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Enter host <Alt+R>
pod3-3.cs.purdue.edu
// illustration of enum
#include <stdio.h>
#include <stdlib.h>
typedef enum Sports {football, tennis, soccer, golf, basketball} sports_t;
main()
{
    sports_t user_input;

    // assume user has selected through GUI what sport
    user_input = soccer;

    switch(user_input) {
        case football:
            printf("channels 5000, 5002, 5005, 6001\n");
            break;
        case tennis:
            printf("channels 2000, 2002\n");
            break;
        case soccer:
            printf("no channels\n");
            break;
    }
    "main.c" 36L, 670C
6,1
```

0 1 2 3 4

this type

```
pod3-3.cs.purdue.edu
user_input = soccer;
switch(user_input) {
    case football:
        printf("channels 5000, 5002, 5005, 6001\n");
        break;
    case tennis:
        printf("channels 2000, 2002\n");
        break;
    case soccer:
        printf("no channels\n");
        break;
    case golf:
        printf("channel 3050\n");
        break;
    case basketball:
        printf("channels 3600, 3604, 3608\n");
        break;
    default:
        fprintf(stderr, "invalid selection: something's wrong\n");
        exit(1);
}
36,1
Ready ssh2: AES-256-CTR 24, 1 25 Rows, 92 Cols VT100 CAP N
```

union

```
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pod3-3.cs.purdue.edu
// illustration of union
#include <stdio.h>
#include <stdlib.h>

enum number_type {
    integer,
    single_precision,
    double_precision
};

typedef union number {
    int nint;
    float nfloat;
    double ndouble;
} number_t;

main()
{
    enum number_type user_selection;
    number_t x, y, z;

    // assume user has selected through GUI what number type
    "main1.c" 48L, 885C 1,1 To
```

```
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} number_t;

main()
{
    enum number_type user_selection;
    number_t x, y, z;

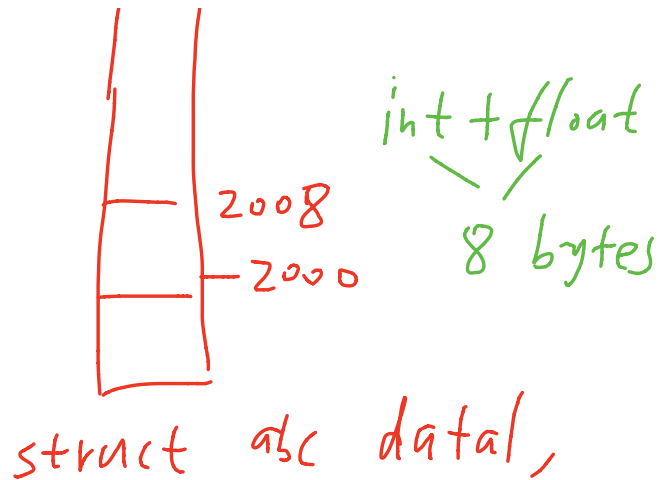
    // assume user has selected through GUI what number type
    user_selection = integer;

    switch(user_selection) {
        case integer:
            scanf("%d %d", &x.nint, &y.nint);
            z.nint = y.nint / x.nint;
            printf("%d\n", z.nint);
            break;
        case single_precision:
            scanf("%f %f", &x.nfloat, &y.nfloat);
            z.nfloat = y.nfloat / x.nfloat;
            printf("%f\n", z.nfloat);
            break;
        case double_precision:
            scanf("%lf %lf", &x.ndouble, &y.ndouble);
    }
}
```

```

struct abc {
    int x;
    float y;
}

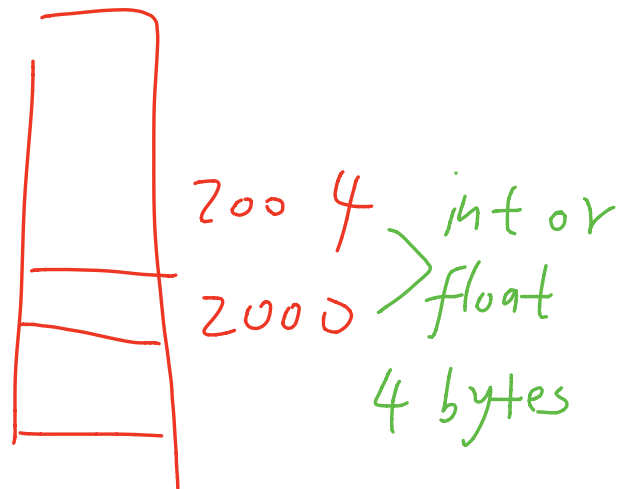
```



```

union abc {
    int x;
    float y;
}

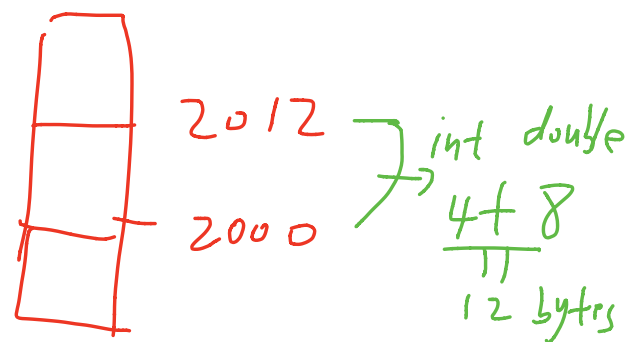
```



```

struct abc {
    int x;
    double y;
}

```



```

union abc {
    int x;
    double y;
}

```

