Array Pointers (1B)

p1.c

```
#include <stdio.h>

int main(void) {
  int a[4] = {1,2,3,4};
  int (*p)[4];


  p = &a;

  printf("(*p)[0]=%d \n", (*p)[0]);
  printf("(*p)[1]=%d \n", (*p)[1]);
  printf("(*p)[2]=%d \n", (*p)[2]);
  printf("(*p)[3]=%d \n", (*p)[3]);

  printf("%ld \n", (a+1) - (a+2));
  printf("%ld \n", (long)(a+1) - (long)(a+2));

  printf("%ld \n", (p+1) - (p+2));
  printf("%ld \n", (long)(p+1) - (long)(p+2));



}
```

```
(*p)[0]=1
(*p)[1]=2
(*p)[2]=3
(*p)[3]=4
-1
-4
-1
-16
```

p2.c

```
#include <stdio.h>

void func(int d[])
{
  printf("sizeof(d)=%ld \n", sizeof(d));
  printf("sizeof(*d)=%ld \n", sizeof(*d));
}

int main(void) {
  int a[4];
  int *b;
  int **c;

  int (*p)[4];

  printf("sizeof(a)=%ld \n", sizeof(a));
  printf("sizeof(*a)=%ld \n", sizeof(*a));

  printf("sizeof(b)=%ld \n", sizeof(b));
  printf("sizeof(*b)=%ld \n", sizeof(*b));

  printf("sizeof(c)=%ld \n", sizeof(c));
  printf("sizeof(*c)=%ld \n", sizeof(*c));

  func(a);

  printf("sizeof(p)=%ld \n", sizeof(p));
  printf("sizeof(*p)=%ld \n", sizeof(*p));

}
```

```
sizeof(a)=16
sizeof(*a)=4
sizeof(b)=8
sizeof(*b)=4
sizeof(c)=8
sizeof(*c)=8
sizeof(d)=8
sizeof(*d)=4
sizeof(p)=8
sizeof(*p)=16
```