

```
/*--- substring.c ---*/
//Mike Hanling
```

```
#include <stdio.h>
#include <string.h>
```

```
char* is_in(char* target, char* test);
```

```
int main() {
    char tar[128];
    char test[128];

    printf("Target: ");
    scanf(" %s", tar);
    printf("Test: ");
    scanf(" %s", test);

    printf("%s\n", is_in(tar, test));

    return 0;
} //end main
```

```
char* is_in(char* target, char* test) {
    int isin = -1; //stays -1 if first letter of target is not in test

    //if target is longer than test, then no
    if (strlen(target) > strlen(test)) {
        return "no";
    }

    //for each letter in test
    for (int i = 0; i < strlen(test); i++) {
        //if this letter matches first letter of target
        if (test[i] == target[0]) {
            isin = 1;
            //check the subsequent letters of target against test
            for (int j = 0; j < strlen(target); j++) {
                if (test[i+j] != target[j]) {
                    isin = 0;
                }
            }
            //if all match, then yes
            if (isin == 1) return "yes";
        }
    }

    //if all never matched, then no
    return "no";
}
```

```
/*--- pairs.c ---*/
//Mike Hanling
```

```
#include <stdio.h>
```

```
void readin(double* array, int size);
void printpairs(double* array1, double* array2, int size);
```

```
int main() {
    int numpairs = 0;

    printf("N: ");
```

```
fflush(stdout);
scanf(" %i", &numpairs);
```

```
double x[numpairs];
double y[numpairs];
```

```
printf("x values: ");
fflush(stdout);
readin(x, numpairs);
printf("y values: ");
fflush(stdout);
readin(y, numpairs);
```

```
printpairs(x, y, numpairs);
```

```
return 0;
} //end main
```

```
void readin(double* array, int size){
    for (int i = 0; i < size; i++) {
        scanf(" %lg", &array[i]);
    }
}
```

```
void printpairs(double* array1, double* array2, int size) {
    for (int i = 0; i < size; i++) {
        printf("(g,g) ", array1[i], array2[i]);
    }
    printf("\n");
}
```