

## Rešitve pisnega izpita z dne 7. septembra 2001

### 1. naloga (25%)

```
#include <stdio.h>
#define MAX 26

main() {
    int c, i;
    int crke[MAX];

    for( i=0; i<MAX; i++ )
        crke[i] = 0;
    while( (c=getchar()) != EOF ) {
        if( c != '\n' ) {
            if( (c >= 'a') && (c <= 'z') )
                ++crke[c-'a'];
            if( (c >= 'A') && (c <= 'Z') )
                ++crke[c-'A'];
        }
        else {
            for( i=0; i<MAX; i++ ) {
                if( crke[i] > 0 )
                    printf("%c ", 'a'+i);
                crke[i] = 0;
            }
            printf("\n");
        }
    }
}
```

### 2. naloga (25%)

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

main(int argc, char *argv[]) {
    FILE *fp1, *fp2;
    int ch, prev;

    if( (fp1 = fopen(argv[1], "r")) == NULL)
        exit(0);
    if( (fp2 = fopen(argv[2], "w")) == NULL) {
        fclose(fp1);
        exit(0);
    }
    prev = 0;
    while( (ch=getc(fp1)) != EOF ) {
        if( isalpha(ch) && ((prev == ' ') || (prev == '\n') || (prev == '\t')) )
            putc(toupper(ch), fp2);
        else
            putc(tolower(ch), fp2);
        prev = ch;
    }
    fclose(fp1);
    fclose(fp2);
}
```

### 3. naloga (25%)

```
#include <stdio.h>
#include <math.h>
#define MAX_TOCK 10
```

```

#define MAX_CRT 10

int tocke[MAX_TOCK][2];
int crte[MAX_CRT][2];

main() {
    int i;
    int x1, y1, x2, y2;
    double dolzina;

    dolzina = 0;
    for( i=0; i<MAX_CRT; i++ ) {
        x1 = tocke[crte[i][0]][0];
        y1 = tocke[crte[i][0]][1];
        x2 = tocke[crte[i][1]][0];
        y2 = tocke[crte[i][1]][1];
        dolzina += sqrt((y2-y1)*(y2-y1) + (x2-x1)*(x2-x1));
    }
}

```

#### 4. naloga (25%)

```

void dodaj(struct elem **p, char niz[]) {
    struct elem *q, *r;

    q = (struct elem*) malloc(sizeof(struct elem));
    strcpy(q->niz, niz);
    if ( (*p == NULL) || (strcmp(niz, (*p)->niz) < 0) ) { // dodaj na zacetek seznama
        q->naprej = *p;
        q->nazaj = NULL;
        (*p)->nazaj = q;
        *p = q;
    } else {
        // poisci ustrezno mesto v seznamu za nov element
        r = *p;
        while ( (r->naprej != NULL) && (strcmp(niz, r->naprej->niz) > 0 ) )
            r = r->naprej;
        // dodaj za element, na katerega kaze r
        q->naprej = r->naprej;
        r->naprej = q;
        q->nazaj = r;
        if( q->naprej != NULL)
            q->naprej->nazaj = q;
    }
}

```