

Soluzioni 28-01-2009

ES1

```
void stampa(int k) {
    if (k!=0)
    { cout << "hip ";
      stampa(k-1);
      cout << "hurra ";
    }
}
```

ES2

```
elem* fondi(elem* l1, elem* l2) {
    elem* l3=0,* r;
    for (elem* p=l1; p!=0; p=p->pun)
    {
        elem* q=l2;
        for (;q!=0 && strcmp(q->nome,p->nome); q=q->pun);
        if (q==0)
        { r=new elem;
          r->nome= new char [strlen(p->nome)+1];
          strcpy(r->nome,p->nome);
          r->pun=l3;
          l3=r;
        }
    }
    for (elem* p=l2; p!=0; p=p->pun)
    {
        elem* q=l1;
        for (;q!=0 && strcmp(q->nome,p->nome); q=q->pun);
        if (q==0)
        { r=new elem;
          r->nome= new char [strlen(p->nome)+1];
          strcpy(r->nome,p->nome);
          r->pun=l3;
          l3=r;
        }
    }
    return l3;
}
```

ES3

```
int* occur(char* mat, int n, int m)
{
    int* v=new int[26];
    for (int i=0; i<26; i++)
        v[i]=0;
    for(int i=0; i<n; i++)
        for (int j=0; j<m; j++)
            v[mat[i*m+j]-'a']++;
    return v;
}
```

ES4

$(234)_5 = (69)_{10} = (105)_8$
 $(10001101)_{\text{compl}2} = (-115)_{10}$

ES5

A::f() x=5
A::x=5
B::f() x=8
B::x=8
C::f() x=2
C::x=2
C::f() x=2
C::f() x=2
C::f() x=2
via C
via B
via A

ES6

3.6
4.6
2
6.6
5
6