Општинско такмичење из програмирања за ученике основних школа
12. март 2011
I категорија (5. и 6. разред)

Програмски језик PASCAL

1. STOLOVI

```pascal
Program STOLOVI;
Var r,s1,s2,b,s3,z:integer;
Begin
    readln(r,s1,s2,b);
    z:=s1*5+s2*7+b;
    s3:=(r-z) div 2;
    writeln(s3)
End.
```

2. JELO

```pascal
Program JELO;
Var p,z,p1,z1:integer;
Begin
    readln(p,z);
    p:=2*p-round(2*p*0.2);
    p1:=p div 2;
    z1:=2*z div 3;
    if p1 <= z1 then writeln(p1)
    else writeln(z1)
End.
```

3. KARTA

```pascal
Program KARTA;
Var h,v,p,r:integer;
Begin
    h:=0; v:=0;
    readln(p,r);
    if (p mod 2 = 0) then r:=-r;
    if (p>2) then h:=h+r
    else v:=v+r;
    readln(p,r);
    if (p mod 2 = 0) then r:=-r;
    if (p>2) then h:=h+r
    else v:=v+r;
    readln(p,r);
    if (p mod 2 = 0) then r:=-r;
    if (p>2) then h:=h+r
    else v:=v+r;
    if (h=0) or (v=0) then writeln('ISTA')
    else begin
        if (v>0) then write('S')
        else write('J');
        if (h>0) then writeln('I')
        else writeln('Z')
    end
End.
```

Програмски језик BASIC

1. STOLOVI
```
REM STOLOVI
INPUT R
INPUT S1
INPUT S2
INPUT B
Z = S1 * 5 + S2 * 7 + B
S3 = INT((R - Z) / 2)
PRINT S3
END
```

2. JELO
```
REM JELO
INPUT P
INPUT Z
P = 2 * P - INT(2 * P * 0.2 + 0.5)
P1 = INT(P / 2)
Z1 = INT(2 * Z / 3)
IF P1 <= Z1 THEN
    PRINT P1
ELSE
    PRINT Z1
END IF
END
```

3. KARTA
```
REM KARTA
H = 0
V = 0
INPUT P
INPUT R
IF P MOD 2 = 0 THEN R = -R
IF P > 2 THEN H = H + R ELSE V = V + R
INPUT P
INPUT R
IF P MOD 2 = 0 THEN R = -R
IF P > 2 THEN H = H + R ELSE V = V + R
INPUT P
INPUT R
IF P MOD 2 = 0 THEN R = -R
IF P > 2 THEN H = H + R ELSE V = V + R
IF H = 0 OR V = 0 THEN
    PRINT "ISTA"
ELSE
    IF V > 0 THEN
        PRINT "S";
    ELSE
        PRINT "J";
    END IF
    IF H > 0 THEN PRINT "I" ELSE PRINT "Z"
END IF
END
```

Програмски језик C++

1. STOLOVI

```cpp
// Stolovi
#include <iostream>
int main(){
    int r,s1,s2,s3,b,z;
    cin >> r >> s1 >> s2 >> b;
    z=s1*5+s2*7+b;
    s3=(r-z)/2;
    cout << s3;
}
```

2. JELO

```cpp
// Jelo
#include <iostream>
int main(){
    int p,z,p1,z1;
    cin >> p >> z;
    p=2*p-(int)(2*p*0.2+0.5);
    p1=p/2;
    z1=2*z/3;
    if(p1<=z1) cout << p1;
    else cout << z1;
}
```

3. KARTA

```cpp
// Karta
#include <iostream>
int main(){
    int h,v,p,r;
    h=0; v=0;
    cin >> p >> r;
    if (p%2==0) r=-r;
    if (p>2) h=h+r;
    else v=v+r;
    cin >> p >> r;
    if (p%2==0) r=-r;
    if (p>2) h=h+r;
    else v=v+r;
    cin >> p >> r;
    if (p%2==0) r=-r;
    if (p>2) h=h+r;
    else v=v+r;
    if ((h==0)||(v==0)) cout << "ISTA\n";
    else {
        if (v>0) cout << "S";
        else cout << "J";
        if (h>0) cout << "I\n";
        else cout << "Z\n";
    }
}
```