

ZPS_PevneBody

December 3, 2015

```
In [2]: import itertools
import zpu as zpu
import re
import sys
```

```
In [3]: def subs(dic, n):
        s = dic["0"]
        i = 1
        while len(s) < n:
            s = s + dic[s[i]]
            i = i + 1
        return s[:n]
```

```
In [4]: cpattern = re.compile("^R+$")
        dpattern = re.compile("^(\d)+$")
```

```
In [ ]: for rep1 in range(1,11):  
        for rep2 in range(1,12):  
            phi0 = ['0'+ ''.join(i) for i in itertools.product('01', repeat=rep1)]  
            phi1 = ['',].join(j) for j in itertools.product('01', repeat=rep2)]  
            cart = [ k for k in itertools.product(phi0, phi1)]  
            n = 300  
            for rule in cart:  
                dicti = {"0": rule[0], "1": rule[1]}  
                word = subs(dicti, n)  
                ret = zpu.isZps(word)  
                if (ret[0]==True):  
                    bis = zpu.maximizeRinBiseq(ret[1], ret[2])  
                    if not (re.match(cpattern, bis[1])) and \  
not (re.match(dpattern, word)):  
                        print(str(dicti) + str(ret[0]) + " slovo: " + word[:50])  
                        print(bis)  
                        print("")
```

```
{'0': '01', '1': '10'}True slovo: 01101001100101101001011001101001100101100110100101
['011111111', 'RERERERER']
```

[illegible][illegible]

