

## Домашнее задание (лекция 3)

### сопоставление по образцу, бинарные строки

#### BS01: Извлечь из строки первое слово:

Пример:

```
1> BinText = <<"Some text">>.
<<"Some Text">>
2> bs01:first_word(BinText).
<<"Some">>
```

#### BS02: Разделить строку на слова:

Пример:

```
1> BinText = <<"Text with four words">>.
<<"Text with four words">>
2> bs02:words(BinText).
[<<"Text">>, <<"with">>, <<"four">>, <<"words">>]
```

#### BS03: Разделить строку на части, с явным указанием разделителя:

Пример:

```
1> BinText = <<"Col1-:-Col2-:-Col3-:-Col4-:-Col5">>.
<<"Col1-:-Col2-:-Col3-:-Col4-:-Col5">>
2> bs03:split(BinText, "-:-").
[<<"Col1">>, <<"Col2">>, <<"Col3">>, <<"Col4">>, <<"Col5">>]
```

#### BS04: Разобрать JSON:

Пример:

```
1> Json = <<"
1> {
1>   'squadName': 'Super hero squad',
1>   'homeTown': 'Metro City',
1>   'formed': 2016,
1>   'secretBase': 'Super tower',
1>   'active': true,
1>   'members': [
1>     {
1>       'name': 'Molecule Man',
1>       'age': 29,
1>       'secretIdentity': 'Dan Jukes',
1>       'powers': [
1>         'Radiation resistance',
1>         'Turning tiny',
1>         'Radiation blast'
1>       ]
1>     },
1>     {
1>       'name': 'Madame Uppercut',
1>       'age': 39,
1>       'secretIdentity': 'Jane Wilson',
1>       'powers': [
1>         'Million tonne punch',
1>         'Damage resistance',
```

```
1>         'Superhuman reflexes'
1>     ]
1> },
1> {
1>     'name': 'Eternal Flame',
1>     'age': 1000000,
1>     'secretIdentity': 'Unknown',
1>     'powers': [
1>         'Immortality',
1>         'Heat Immunity',
1>         'Inferno',
1>         'Teleportation',
1>         'Interdimensional travel'
1>     ]
1> }
1> ]
1> }
1> }
1> ">>.
```

```
>> bs04:decode(Json, proplist).
[[{"squadName": "Super hero squad",
  {"homeTown": "Metro City",
   {"formed": 2016,
    {"secretBase": "Super tower",
     {"active": true,
      {"members":
        [{"name": "Molecule Man",
          {"age": 29,
           {"secretIdentity": "Dan Jukes",
            {"powers":
              [{"Radiation resistance": "Turning tiny",
               "Radiation blast"}]}],
          {"name": "Madame Uppercut",
           {"age": 39,
            {"secretIdentity": "Jane Wilson",
             {"powers":
              [{"Million tonne punch": "Damage resistance",
               "Superhuman reflexes"}]}],
          {"name": "Eternal Flame",
           {"age": 1000000,
            {"secretIdentity": "Unknown",
             {"powers":
              [{"Immortality": "Heat Immunity", "Inferno",
               "Teleportation", "Interdimensional travel"}]}]}]}]}]}]}]]]
```

```
3> bs04:decode(Json, map).
#{<<"active">> => true,<<"formed">> => 2016,
  <<"homeTown">> => <<"Metro City">>,
  <<"members">> =>
    [#(<<"age">> => 29,<<"name">> => <<"Molecule Man">>,
      <<"powers">> =>
        [<<"Radiation resistance">>,<<"Turning tiny">>,
          <<"Radiation blast">>],
      <<"secretIdentity">> => <<"Dan Jukes">>},
      #(<<"age">> => 39,<<"name">> => <<"Madame Uppercut">>,
        <<"powers">> =>
          [<<"Million tonne punch">>,<<"Damage resistance">>,
            <<"Superhuman reflexes">>],
          <<"secretIdentity">> => <<"Jane Wilson">>},
      #(<<"age">> => 1000000,<<"name">> => <<"Eternal Flame">>
```

```
<<"powers">> =>
  [<<"Immortality">>,<<"Heat Immunity">>,<<"Inferno">>,
   <<"Teleportation">>,<<"Interdimensional travel">>],
  <<"secretIdentity">> => <<"Unknown">>}],
<<"secretBase">> => <<"Super tower">>,
<<"squadName">> => <<"Super hero squad">>}
```