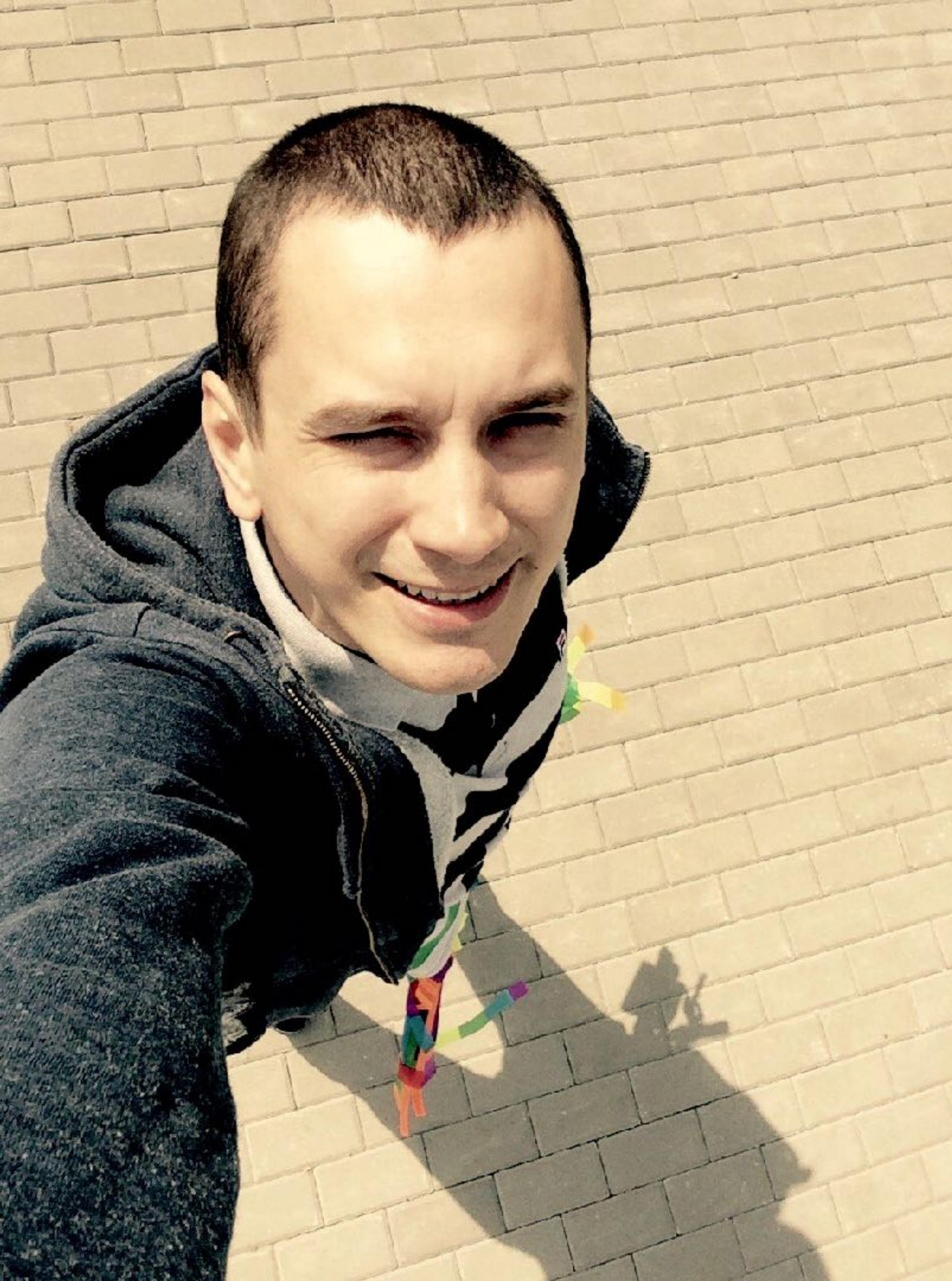


ASYNC/AWAIT С НУЛЯ

АСИНХРОННЫЙ JAVASCRIPT ДЛЯ ЧАЙНИКОВ



agrinn.ru

РАЗРАБОТЧИК В PAY P.S.

ARTEM
HALETSKY

ВЫ ЛЮБИТЕ КОФЕ?

ПОПРОБУЕМ КУПИТЬ КОФЕ
ИСПОЛЬЗУЯ КОЛЛБЕКИ

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         console.log("I`m full of energy!!");  
6       } );  
7     } );  
8   } );  
9 }
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy  
5         console.log("I`m full of energ  
6           ));  
7         );  
8       );  
9     })
```



ONE MORE THING...

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           } );  
7         } );  
8       } );  
9     } );  
10 }
```

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           makeCoffee(money, coffee => {  
7             } );  
8           } );  
9           } );  
10          } );  
11        } );  
12 }
```

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           makeCoffee(money, coffee => {  
7             addSugar(coffee, sweetCoffee => {  
8               } );  
9             } );  
10            } );  
11            } );  
12            } );  
13        } );
```

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           makeCoffee(money, coffee => {  
7             addSugar(coffee, sweetCoffee => {  
8               drinkCoffee(sweetCoffee, energy => {  
9                 //N000000ooooo!!!  
10                }));  
11                }));  
12                }));  
13              });
```

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           makeCoffee(money, coffee => {  
7             addSugar(coffee, sweetCoffee => {  
8               drinkCoffee(sweetCoffee, energy => {  
9                 doWork(energy, money => {  
10                makeCoffee(money, coffee => {  
11                  addSugar(coffee, sweetCoffee => {  
12                    // AAAAAAAAaaaaaa!!!!  
13                  })•
```


CALLBACK HELL



PROMISE

Переводчик

английс...



русский

promise



обещание



7/5000



Предложить исправление

ПОПРОБУЕМ КУПИТЬ КОФЕ
ИСПОЛЬЗУЯ ОБЕЩАНИЯ

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))  
4     .then(sweetCoffee => drinkCoffeeAsync(sweetCoffee))
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))  
4     .then(sweetCoffee => drinkCoffeeAsync(sweetCoffee))  
5     .then(energy => console.log("I`m full of energy!!"))
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))  
4     .then(sweetCoffee => drinkCoffeeAsync(sweetCoffee))  
5     .then(energy => console.log("I`m full of energy!!"))  
6     .catch(problem => callToMom(problem));  
7 }
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))  
4     .then(sweetCoffee => drinkCoffeeAsync(sweetCoffee))  
5     .then(energy => console.log("I`m full!"))  
6     .catch(problem => callToMom(problem))  
7 }
```



ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE

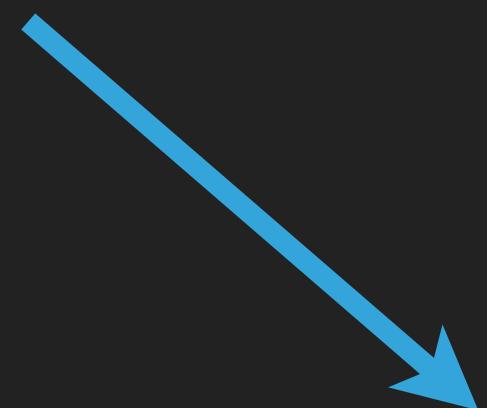


```
1 function makeCoffeeAsync(money){  
2   return new Promise((resolve, reject) => {  
3     makeCoffee(money, coffee => {  
4       resolve(coffee);  
5     });  
6   });  
7 }
```

ITERATOR

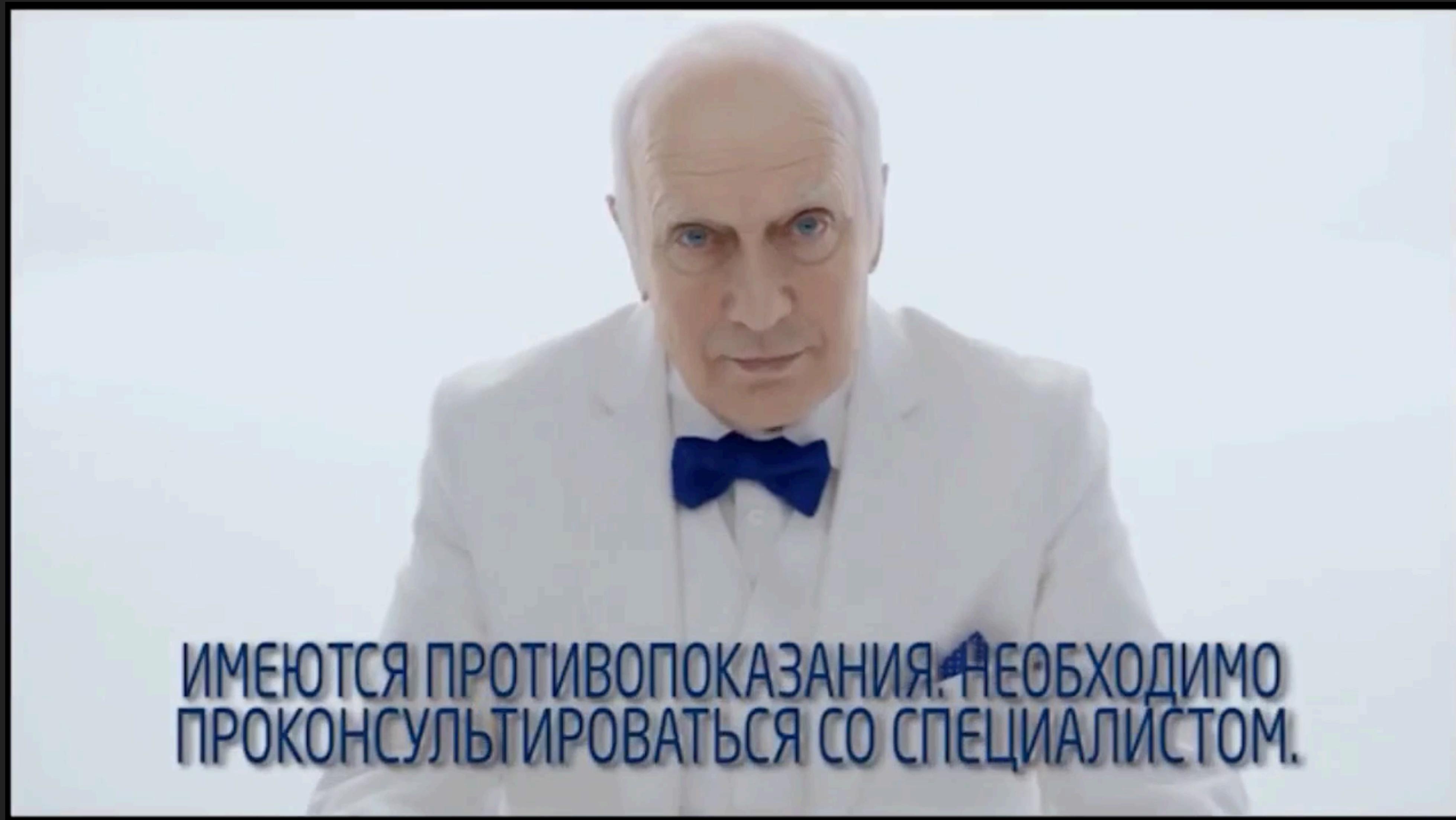
ITERATOR.NEXT()

ITERATOR.NEXT()



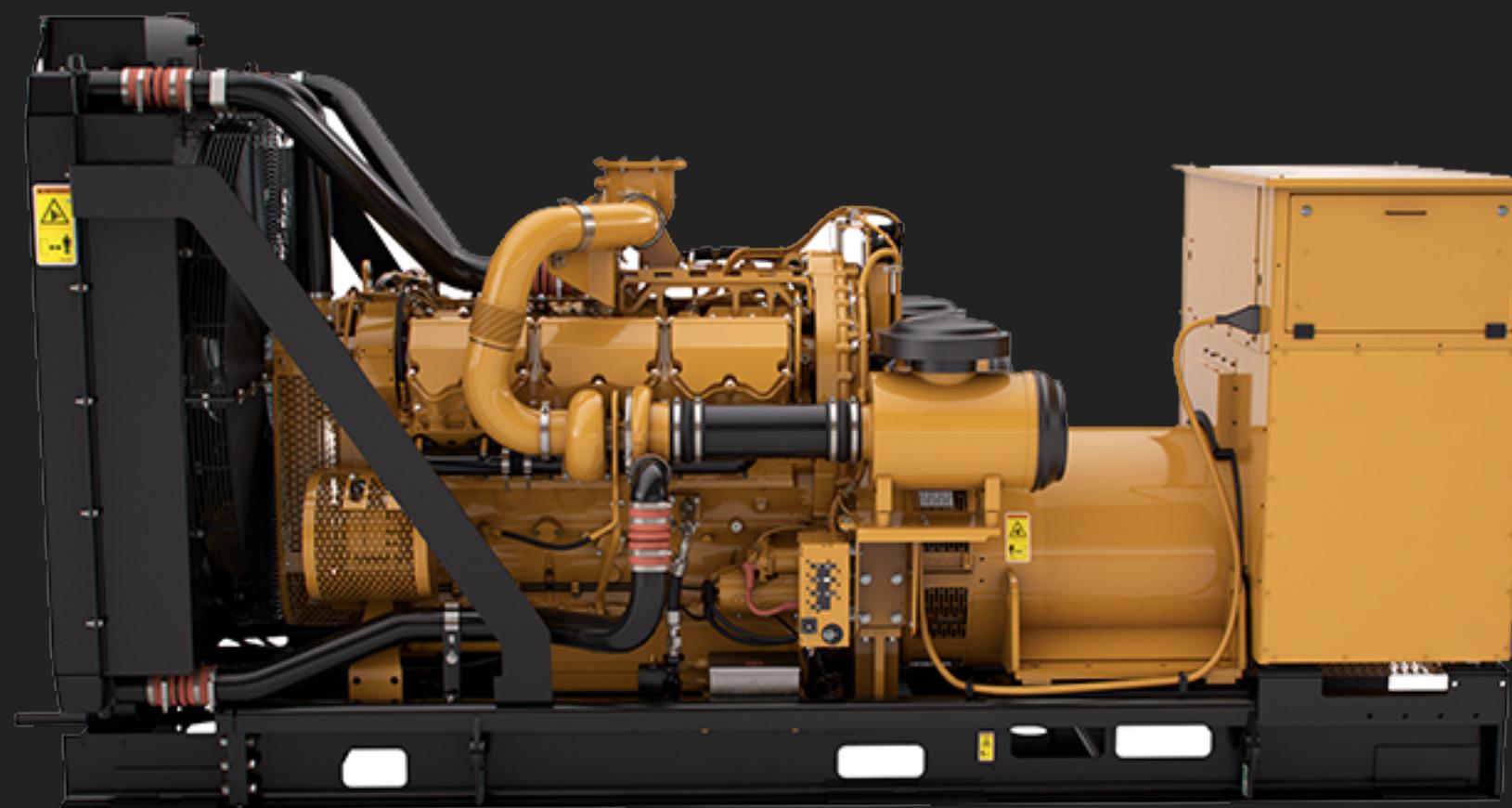
{ VALUE; DONE }

ВСПОМНИМ ОБ ИТЕРАТОРАХ



ИМЕЮТСЯ ПРОТИВОПОКАЗАНИЯ. НЕОБХОДИМО
ПРОКОНСУЛЬТИРОВАТЬСЯ СО СПЕЦИАЛИСТОМ.

GENERATOR



FUNCTION* GENERATOR(){}

ITERATOR = GENERATOR()

YIELD

```
FUNCTION* GENERATOR() {
```

```
    ...
```

```
    YIELD
```

```
    ...
```

```
}
```

ITERATOR.NEXT()

FUNCTION* GENERATOR() {

...

YIELD

...

}

ITERATOR.NEXT()

FUNCTION* GENERATOR() {

...

YIELD //PAUSE

...

}

LET A = ITERATOR.NEXT()

FUNCTION* GENERATOR() {

...

YIELD 1

...

}

LET A = ITERATOR.NEXT(B)

FUNCTION* GENERATOR() {

...

LET VALUE = YIELD 1

...

}

```
LET A = ITERATOR.NEXT(B)
LET A2 = ITERATOR.NEXT(B2)

FUNCTION* GENERATOR() {
    ...
    LET VALUE = YIELD 1
    ...
    LET VALUE2 = YIELD 2
    ...
}
```

```
LET A = ITERATOR.NEXT(B)  
LET A2 = ITERATOR.NEXT(B2)
```

```
FUNCTION* GENERATOR() {
```

```
    ...
```

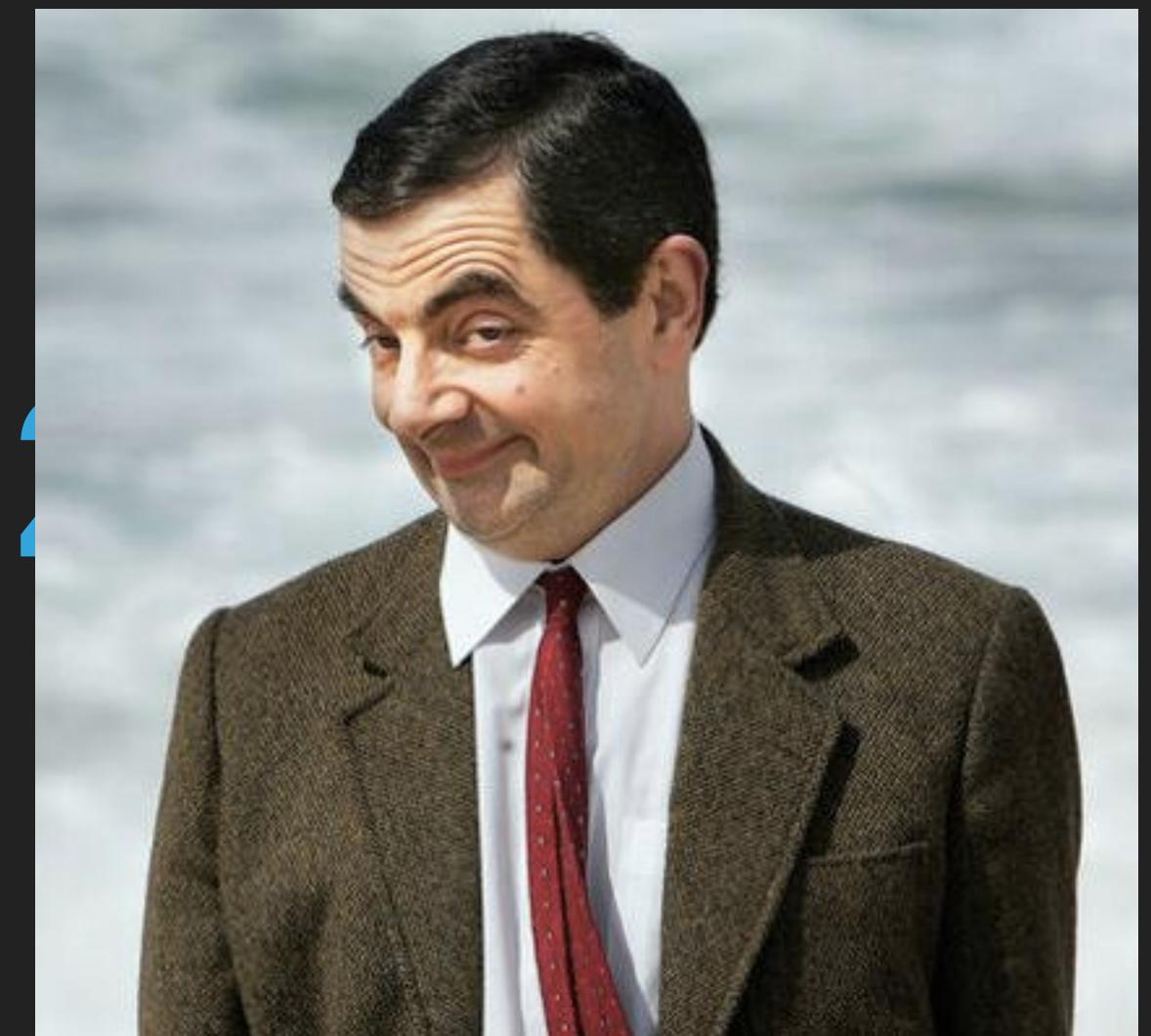
```
    LET VALUE = YIELD 1
```

```
    ...
```

```
    LET VALUE2 = YIELD 2
```

```
    ...
```

```
}
```



ПОПРОБУЕМ КУПИТЬ КОФЕ
ИСПОЛЬЗУЯ GENERATOR И PROMISES

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);
```

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);
```

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);  
4   let energy      = yield drinkCoffeeAsync(sweetCoffee);
```

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);  
4   let energy      = yield drinkCoffeeAsync(sweetCoffee);  
5   console.log("I`m full of energy!!");  
6 }
```

GENERATOR + PROMISE



```
1 function execute(iterator, yieldValue) {  
2   let current = iterator.next(yieldValue);  
3   if (!current.done) {  
4     current.value  
5       .then(result => execute(iterator, result))  
6       .catch(err => iterator.throw(err));  
7   }  
8 }
```

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);  
4   let energy      = yield drinkCoffeeAsync(sweetCoffee);  
5   console.log("I`m full of energy!!");  
6 }  
7 execute(buyCoffee(money));
```

CO

БИБЛИОТЕКА СО



```
1 co(function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);  
4   let energy      = yield drinkCoffeeAsync(sweetCoffee);  
5   console.log("I`m full of energy!!");  
6 });
```

ПОКУПАЕМ КОФЕ
ИСПОЛЬЗУЯ ASYNC/AWAIT

ASYNC/AWAIT ВЕРСИЯ



```
1 async function buyCoffee(money){  
2   let coffee      = await makeCoffeeAsync(money);  
3   let sweetCoffee = await addSugarAsync(coffee);  
4   let energy      = await drinkCoffeeAsync(sweetCoffee);  
5   console.log("I`m full of energy!!");  
6 } );
```



КОНТАКТЫ

- ▶ <http://agrinn.ru>
- ▶ <https://t.me/grinnart>

КОМПАНИЯ PAY P.S.

- ▶ <https://payps.ru>





ВСЕМ СПАСИБО!

... а теперь вопросы =)