

# **ЛАБОРАТОРНАЯ РАБОТА № 6**

**ОСНОВЫ WEB-ПРОГРАММИРОВАНИЯ**

**1**







# ЗАДАНИЕ 1. GLITCH

# HTML

```
<DIV CLASS="CONTAINER">
```

```
<H1 CLASS="GLITCH">ВЕРНИТЕ МОЙ 2015</H1>
```

```
</DIV>
```



# CSS

---

```
BODY, HTML {  
    WIDTH:100%;  
    HEIGHT:100%;  
}
```

# CSS

---

```
BODY {  
    BACKGROUND-COLOR: #000;  
}
```

# CSS

---

```
BODY {
```

```
    BACKGROUND-COLOR: #000000;
```

```
}
```

# CSS

---

```
.CONTAINER {  
  DISPLAY: FLEX;  
  JUSTIFY-CONTENT: CENTER;  
  ALIGN-ITEMS: CENTER;  
  HEIGHT: 100%;  
  WIDTH: 100%;
```

# CSS

---

**.GLITCH {**

**COLOR:#FFFFFF;**

**FONT-FAMILY: 'COMIC SANS MS', CURSIVE, SANS-SERIF;**

**FONT-WEIGHT: 600;**

**FONT-SIZE:100PX;**

**POSITION: RELATIVE;**

**PADDING:30PX;**



# CSS

---

```
&:BEFORE, &:AFTER {  
    CONTENT:'УСЛОВИЕ ПОЛУЧЕНИЯ АВТОМАТА';  
    COLOR:#FFFFFF;  
    POSITION: ABSOLUTE;  
    TOP:0;  
    OVERFLOW:HIDDEN;  
    PADDING:30PX;  
}
```

# CSS

---

```
&:BEFORE {  
    LEFT:3PX;  
    TEXT-SHADOW: -3PX 0 RED;  
    ANIMATION: GLITCH-BEFORE 2S LINEAR 0S INFINITE ALTERNATE;  
}
```

# CSS

---

```
&:AFTER {  
    LEFT:-3PX;  
    TEXT-SHADOW: -3PX 0 BLUE;  
    ANIMATION: GLITCH-AFTER 2S LINEAR 0S INFINITE ALTERNATE;  
}  
}  
}
```

# CSS

---

```
@KEYFRAMES GLITCH-BEFORE {  
  $STEPS: 20;  
  @FOR $I FROM 0 THROUGH $STEPS {  
    #{PERCENTAGE($I*(1/$STEPS))} {  
      CLIP: RECT(RANDOM(150)+PX, 100+PX, RANDOM(150)+PX, 30PX)  
    }  
  }  
}
```



# CSS

---

```
@KEYFRAMES GLITCH-AFTER {
```

```
  $STEPS: 20;
```

```
@FOR $I FROM 0 THROUGH $STEPS {
```

```
  #{PERCENTAGE($I*(1/$STEPS))} {
```

```
    CLIP: RECT(RANDOM(150)+PX, 100+PX, RANDOM(150)+PX, 30PX)
```

```
  }
```

```
}
```

```
}
```

**СПОЙЛЕР**



**НЕ РАБОТАЕТ !!!**

**SCSS**  
***SYNTACTICALLY***  
***AWESOME***  
***STYLESHEETS***

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# ПРИМЕР СЛАЙД 12 В CSS

```
@KEYFRAMES GLITCH-BEFORE {
```

```
  0% {
```

```
    CLIP: RECT(147PX, 300PX, 129PX, 30PX);
```

```
  }
```

```
  5% {
```

```
    CLIP: RECT(12PX, 300PX, 47PX, 30PX);
```

```
  }
```

```
 10% {
```

```
    CLIP: RECT(31PX, 300PX, 131PX, 30PX);
```

```
  }
```

```
 15% {
```

```
    CLIP: RECT(132PX, 300PX, 87PX, 30PX);
```

```
  }
```

```
 20% {
```

```
    CLIP: RECT(49PX, 300PX, 22PX, 30PX);
```

```
  }
```

```
 25% {
```

```
    CLIP: RECT(124PX, 300PX, 49PX, 30PX);
```

```
  }
```

```
 30% {
```

```
    CLIP: RECT(111PX, 300PX, 111PX, 30PX);
```

```
  }
```

```
 35% {
```

```
    CLIP: RECT(41PX, 300PX, 116PX, 30PX);
```

```
  }
```

```
 40% {
```

```
    CLIP: RECT(62PX, 300PX, 57PX, 30PX);
```

```
  }
```

```
 45% {
```

```
    CLIP: RECT(75PX, 300PX, 34PX, 30PX);
```

```
  }
```

```
 50% {
```

```
    CLIP: RECT(136PX, 300PX, 136PX, 30PX);
```

```
  }
```

```
 55% {
```

```
    CLIP: RECT(81PX, 300PX, 82PX, 30PX);
```

```
  }
```

```
 60% {
```

```
    CLIP: RECT(85PX, 300PX, 13PX, 30PX);
```

```
  }
```

```
 65% {
```

```
    CLIP: RECT(36PX, 300PX, 122PX, 30PX);
```

```
  }
```

```
 70% {
```

```
    CLIP: RECT(116PX, 300PX, 89PX, 30PX);
```

```
  }
```

```
 75% {
```

```
    CLIP: RECT(145PX, 300PX, 21PX, 30PX);
```

```
  }
```

```
 80% {
```

```
    CLIP: RECT(17PX, 300PX, 131PX, 30PX);
```

```
  }
```

```
 85% {
```

```
    CLIP: RECT(66PX, 300PX, 14PX, 30PX);
```

```
  }
```

```
 90% {
```

```
    CLIP: RECT(119PX, 300PX, 110PX, 30PX);
```

```
  }
```

```
 95% {
```

```
    CLIP: RECT(7PX, 300PX, 12PX, 30PX);
```

```
  }
```

```
100% {
```

```
    CLIP: RECT(59PX, 300PX, 142PX, 30PX);
```

```
  }
```

```
}
```



---

# HTML

```
<SCRIPT  
SRC="HTTPS://CDNJS.CLOUDFLARE.COM/AJAX/LIBS/SASS.JS  
/0.9.12/SASS.SYNC.MIN.JS">  
</SCRIPT>
```

---

# HTML

**<STYLE TYPE="SCSS">**

# JS

---

**<SCRIPT>**

```
SASS.COMPILE(DOCUMENT.QUERYSELECTOR("STYLE[TYPE=SCSS]").INNERHTML,FUNCTION(RES){  
VAR S=DOCUMENT.CREATEELEMENT("STYLE");  
S.INNERHTML=RES.TEXT;  
RES.FORMATTED&&CONSOLE.ERROR(RES.FORMATTED);  
RES.TEXT&&DOCUMENT.HEAD.APPENDCHILD(S);  
});
```

**</SCRIPT>**



# ЗАДАНИЕ

ПРМЕНИТЬ АНИМАЦИЮ НА ВСЮ ШИРИНУ КОНТЕЙНЕРА



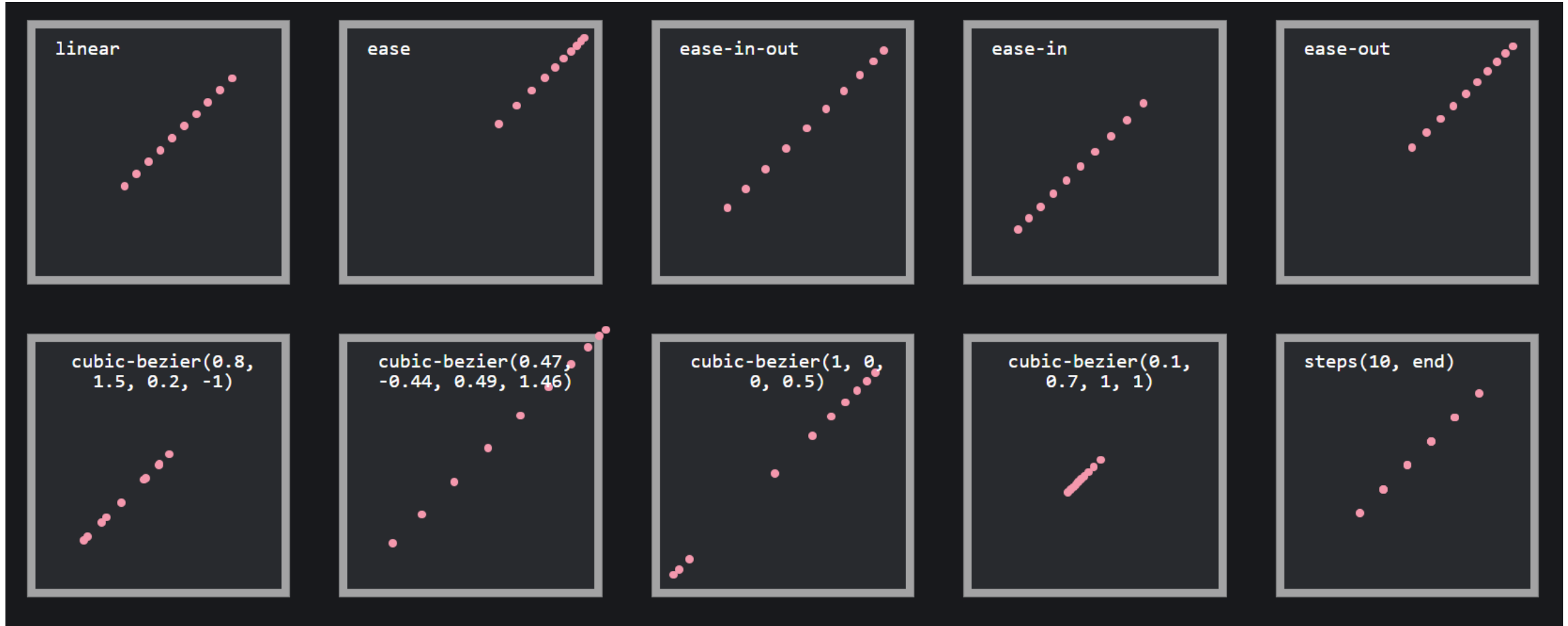


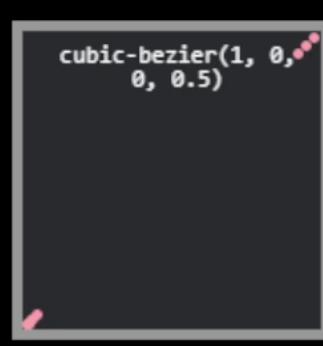
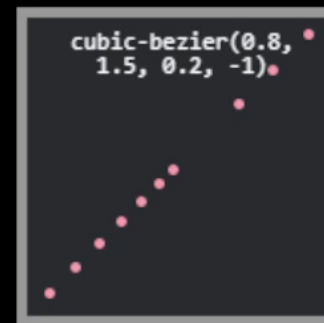
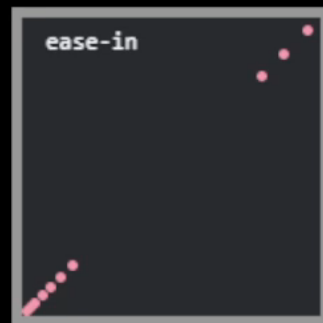
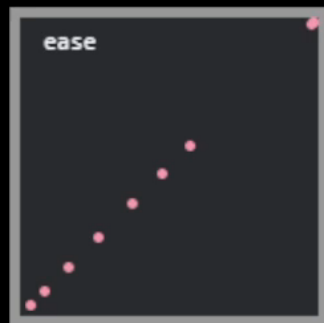
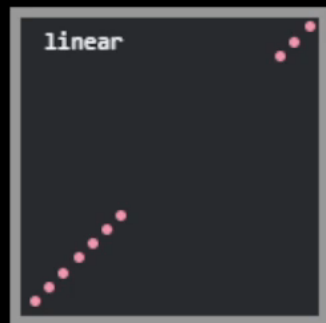
**Верните мой 2015**



## **ЗАДАНИЕ 2. АНИМАЦИИ**









# HTML

---

```
<DIV CLASS="PARENT">
```

```
<DIV CLASS="CHILD-CONTAINER CHILD-CONTAINER-ONE">
```

```
<DIV CLASS="CHILD CHILD-ONE"></DIV>
```

```
</DIV>
```

```
<DIV CLASS="CHILD-CONTAINER CHILD-CONTAINER-TWO">
```

```
<DIV CLASS="CHILD CHILD-TWO"></DIV>
```

```
</DIV>
```

```
</DIV>
```

# CSS

---

```
BODY {  
  DISPLAY: FLEX;  
  ALIGN-ITEMS: CENTER;  
  JUSTIFY-CONTENT: CENTER;  
  BACKGROUND-COLOR: #18191C;  
}
```

# CSS

---

```
.PARENT {
```

```
    DISPLAY: FLEX;
```

```
    WIDTH: 500PX;
```

```
}
```

# CSS

---

```
.CHILD-CONTAINER {  
  DISPLAY: FLEX;  
  WIDTH: 200PX;  
  HEIGHT: 200PX;  
}
```

# CSS

---

```
.CHILD-CONTAINER + .CHILD-CONTAINER {  
  MARGIN-LEFT: 50PX;  
}
```

# CSS

---

```
.CHILD-CONTAINER-ONE {  
    ALIGN-ITEMS: FLEX-START;  
    JUSTIFY-CONTENT: END;  
}
```



# CSS

---

```
.CHILD {  
    BORDER-RADIUS: 25PX;  
}
```

# CSS

---

```
.CHILD-ONE {  
  WIDTH: 50PX;  
  HEIGHT: 200PX;  
  BACKGROUND-COLOR: #F498AD;  
  ANIMATION-NAME: CIRCLE-TO-SQUARE;  
  ANIMATION-DURATION: 3S;  
  ANIMATION-ITERATION-COUNT: INFINITY;  
}
```

# CSS

---

```
.CHILD-TWO {  
  WIDTH: 200PX;  
  HEIGHT: 200PX;  
  BACKGROUND-COLOR: #2E9AFF;  
}
```

## CSS @KEYFRAMES CIRCLE-TO-SQUARE {

---

**0% {**

**WIDTH: 50PX;**

**HEIGHT: 50PX;**

**BACKGROUND-COLOR:**

**#F498AD;**

**}**

**50% {**

**WIDTH: 50PX;**

**HEIGHT: 200PX;**

**BACKGROUND-COLOR:**

**#7F6EDB;**

**}**

**100% {**

**WIDTH: 200PX;**

**HEIGHT: 200PX;**

**BACKGROUND-COLOR:**

**#2E9AFF;**

**}**

**}**

# ЗАДАНИЕ

**Остановить анимацию после первого прохождения**

**После анимации левый объект должен остаться квадратом**

**После анимации цыет не должен меняться**

# ЗАДАНИЕ

**Убрать CSS (Слайд 28)**

**Посмотреть**

**Убрать CSS (Слайд 29)**

**Посмотреть**

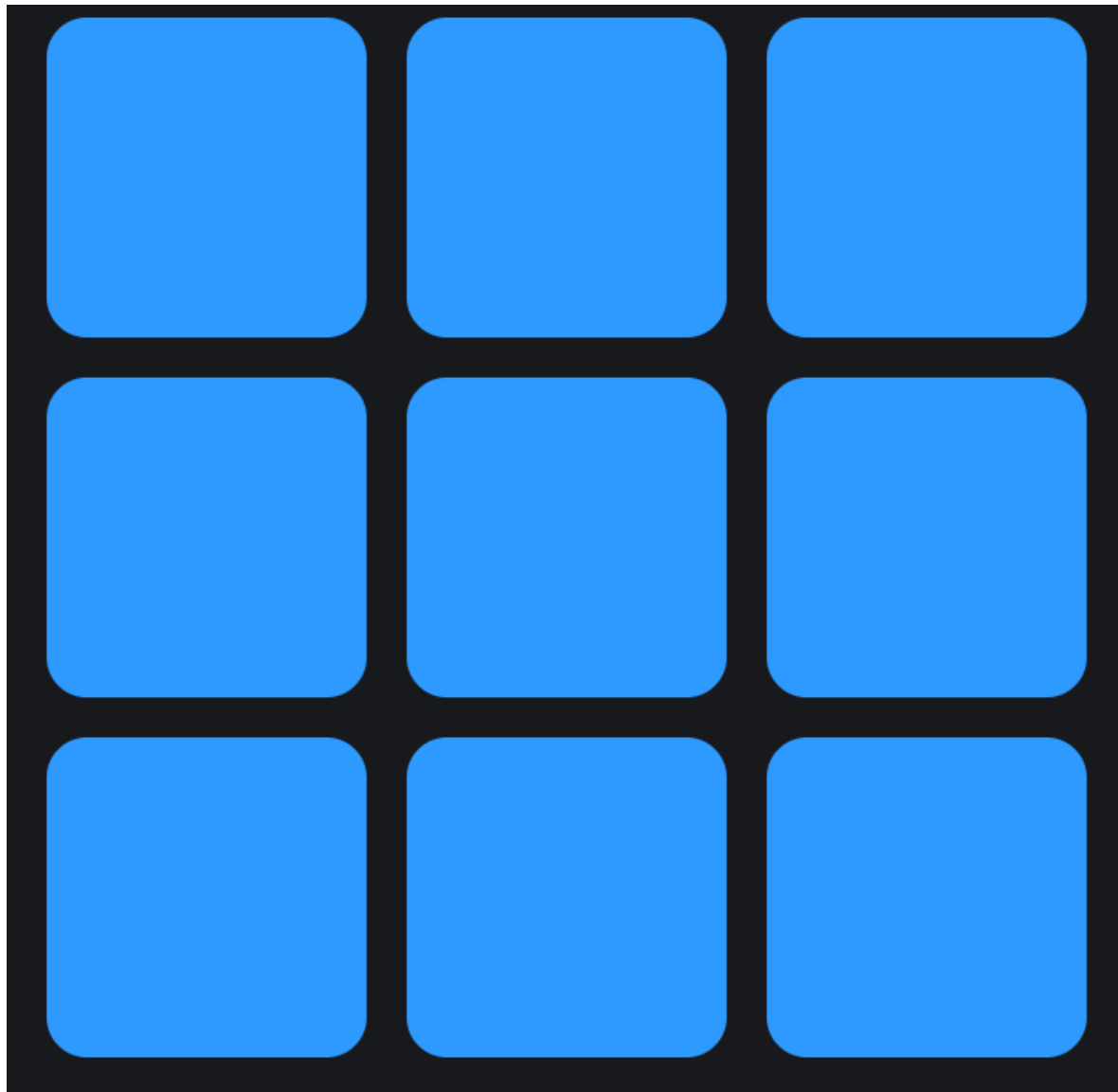
**Вернуть CSS (Слайды 28 и 29)**



# ЗАДАНИЕ

СДЕЛАТЬ ПОЛЕ ИЗ  
АНИМИРОВАННЫХ КВАДРАТОВ  
(3 X 3)

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# ЗАДАНИЕ 3. ВЫДЕЛЕНИЕ

# HTML

---

**<DIV CLASS="PARENT">**

**<DIV CLASS="CHILD-CONTAINER CHILD-CONTAINER-ONE">**

**<DIV CLASS="CHILD CHILD-ONE">**

**</DIV>**

**<DIV CLASS="CHILD CHILD-BACK">**

**</DIV>**

**</DIV>**

**</DIV>**

# CSS .PARENT

---

**ДОБАВИТЬ:**

**POSITION: RELATIVE;**

## CSS .CHILD-ONE

---

**ДОБАВИТЬ:**


**POSITION: ABSOLUTE; Z-INDEX: 2;**

**BACKGROUND: LINEAR-GRADIENT(-45DEG,#99FFFF 0,#44AAFF 100%);**

**BORDER: RGB(255, 20, 147) 0.125EM SOLID;**

**BOX-SHADOW: INSET 0 0 0.5EM 0 RGB(255, 20, 147), 0 0 0.5EM 0 RGB(255, 20, 147);**





***ВОТ КОГДА БУДЕТЕ  
ЗНАТЬ ВОПРОС, ТО  
ПОЙМЕТЕ И ОТВЕТ***





## **CSS .CHILD-ONE:HOVER, .CHILD-ONE:FOCUS**

---

**OUTLINE: NONE;**

**BORDER: RGB(0, 0, 255) 0.25EM SOLID;**

**BOX-SHADOW: 0PX 8PX 4PX 0PX RGBA(0,20,255,0.7),**

**1PX 2PX 8PX 0PX RGBA(0,40,235,0.7),**

**6PX 4PX 16PX 0PX RGBA(0,60,215,0.7),**

**2PX 16PX 32PX 0PX RGBA(0,80,195,0.7);**

# CSS .CHILD-BACK

---

**OPACITY: 0;**

**POSITION: ABSOLUTE; Z-INDEX: 1;**

**WIDTH: 200PX;**

**HEIGHT: 200PX;**

**BOX-SHADOW: 0PX 8PX 4PX 0PX RGBA(220,20,60,0.7),**

**1PX 2PX 8PX 0PX RGBA(200,40,80,0.7),**

**6PX 4PX 16PX 0PX RGBA(180,60,100,0.7),**

**2PX 16PX 32PX 0PX RGBA(160,80,120,0.7);**

**FILTER: BLUR(1PX);**

**BACKGROUND: LINEAR-GRADIENT(-175DEG,#44AAFF 0,#66CCFF 100%);**

**ANIMATION: GLOW 3S INFINITE;**

**ANIMATION-DELAY: 3S;**

# CSS

---

```
@KEYFRAMES GLOW {
```

```
  0% {
```

```
    OPACITY: 0;
```

```
  }
```

```
  50% {
```

```
    OPACITY: 1;
```

```
  }
```

```
  100% {
```

```
    OPACITY: 0;
```

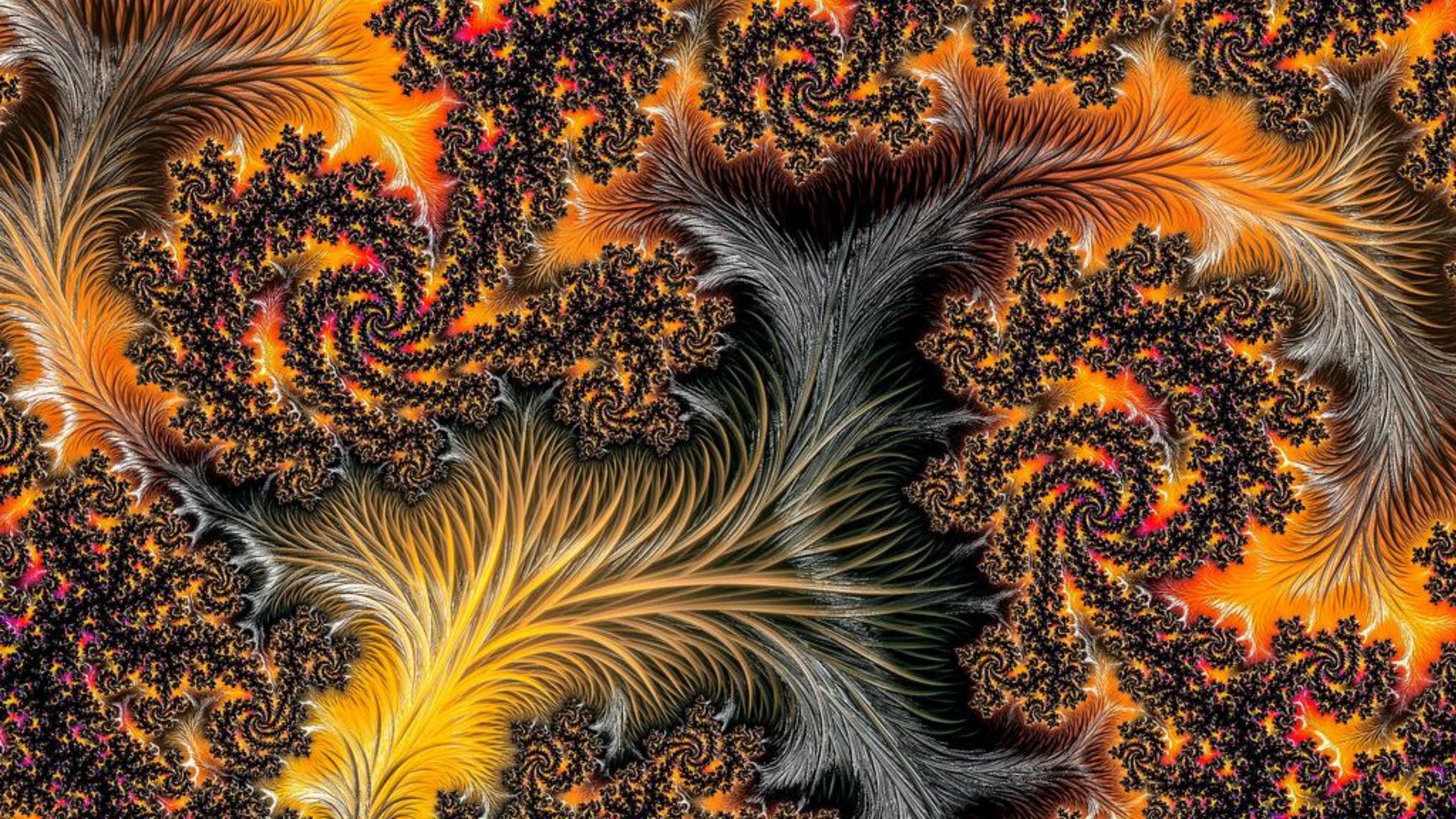
```
  }
```

```
}
```

# **ЗАДАНИЕ**

**ИЗМЕНИТЬ КУРСОР ПРИ НАВЕДЕНИИ НА БЛОК**







# ЗАДАНИЕ. НЕЧЕСТНЫЙ ТТТ





# HTML

---

**<DIV CLASS="ROUND">РАУНД 1</DIV>**

**<DIV CLASS="SCORE">КОМПЬЮТЕР <SPAN CLASS="NUM\_C">0</SPAN> - <SPAN CLASS="NUM\_U">0</SPAN> ИГРОК</DIV>**

**<DIV CLASS="PARENT">**

**<DIV CLASS="VICTORY">ПОБЕДА</DIV>**

**<DIV CLASS="CELL" ID="1" ONCLICK="CELLCLICK('1')"></DIV>**

**<DIV CLASS="CELL" ID="2" ONCLICK="CELLCLICK('2')"></DIV>**

**<DIV CLASS="CELL" ID="3" ONCLICK="CELLCLICK('3')"></DIV>**

**<DIV CLASS="CELL" ID="4" ONCLICK="CELLCLICK('4')"></DIV>**

**<DIV CLASS="CELL" ID="5" ONCLICK="CELLCLICK('5')"></DIV>**

**<DIV CLASS="CELL" ID="6" ONCLICK="CELLCLICK('6')"></DIV>**

**<DIV CLASS="CELL" ID="7" ONCLICK="CELLCLICK('7')"></DIV>**

**<DIV CLASS="CELL" ID="8" ONCLICK="CELLCLICK('8')"></DIV>**

**<DIV CLASS="CELL" ID="9" ONCLICK="CELLCLICK('9')"></DIV>**

**</DIV>**

# CSS

---

```
.PARENT{  
  TEXT-ALIGN: CENTER;  
  MARGIN:0 AUTO;  
  WIDTH:610PX;  
  HEIGHT:610PX;  
  MARGIN:0 AUTO;  
  POSITION: RELATIVE;  
}
```

# CSS

---

```
.PARENT .CELL{  
  BORDER: 1PX SOLID;  
  FLOAT: LEFT;  
  FONT-SIZE: 100PX;  
  HEIGHT: 200PX;  
    VERTICAL-ALIGN: TOP;  
  WIDTH: 200PX;  
}
```

# CSS

---

```
.PARENT .CELL.VICTORY{  
    BACKGROUND-COLOR: RED;  
}  
.ROUND{  
    TEXT-ALIGN: CENTER;  
}  
.SCORE{  
    TEXT-ALIGN: CENTER;  
}
```

# CSS

---

```
.VICTORY{  
  TEXT-ALIGN: CENTER;  
  COLOR: #FFF;  
  BACKGROUND-COLOR: BROWN;  
  PADDING: 30PX 0;  
  FONT-SIZE: 35PX;  
  POSITION: ABSOLUTE;  
  WIDTH: 100%;  
  TOP: 33%;  
  DISPLAY: NONE;  
}
```

**LET M = NEW ARRAY();**

**LET M\_X = NEW ARRAY();**

**LET M\_O = NEW ARRAY();**

**LET RAUND = 1;**

## JS FUNCTION CELLCLICK(ID)

---

```
LET V = 0;
```

```
LET CELL_TEXT = DOCUMENT.GETELEMENTBYID(ID).INNERHTML;
```

```
IF(CELL_TEXT != "") {
```

```
    ALERT("ЗАНЯТО");
```

```
}
```



## **JS FUNCTION CELLCLICK(ID)**

---

**ELSE {**

**DOCUMENT.GETELEMENTBYID(ID).INNERHTML = "X";**

**ID\_CELL = PARSEINT(ID);**

**M.PUSH(ID\_CELL);**

**M\_X.PUSH(ID\_CELL);**

**LET V = VICTORY(M\_X, "ИГРОК");**

## JS FUNCTION CELLCLICK(ID)

---

```
    IF(M_X.LENGTH != 0 && M.LENGTH < 8) {  
        COMPUTER();  
    }  
    IF(M.LENGTH == 8 && V != 1) {  
        NONEVICTORY();  
    }  
}
```

# **FUNCTION VICTORY(METKA, USER)**

---

**VAR SRT1 = 0;**

**VAR SRT2 = 0;**

**VAR SRT3 = 0;**

**VAR ST1 = 0;**

**VAR ST2 = 0;**

**VAR ST3 = 0;**

**VAR D1 = 0;**

**VAR D2 = 0;**

# FUNCTION VICTORY(METKA, USER)

---

```
FOR (VAR I = 0; I < METKA.LENGTH; I++){  
    SWITCH(METKA[I]) {  
        CASE 1: { SRT1++; ST1++; D1++; BREAK; }  
        CASE 2: { SRT1++; ST2++; BREAK; }  
        CASE 3: { SRT1++; ST3++; D2++; BREAK; }  
        CASE 4: { SRT2++; ST1++; BREAK; }  
        CASE 5: { SRT2++; ST2++; D1++; D2++; BREAK; }  
        CASE 6: { SRT2++; ST3++; BREAK; }  
        CASE 7: { SRT3++; ST1++; D2++; BREAK; }  
        CASE 8: { SRT3++; ST2++; BREAK; }  
        CASE 9: { SRT3++; ST3++; D1++;BREAK; }  
    }  
}
```

## **FUNCTION VICTORY(METKA, USER)**

---

```
IF(SRT1 == 3 || SRT2 == 3 || SRT3 == 3){  
DOCUMENT.QUERYSELECTOR(".VICTORY").INNERHTML = "ПОБЕДИЛ " + USER;  
DOCUMENT.QUERYSELECTOR(".VICTORY").STYLE.DISPLAY = "BLOCK";  
VICTORYBEGIN(USER);  
}
```

## **FUNCTION VICTORY(METKA, USER)**

---

```
IF(ST1 == 3 || ST2 == 3 || ST3 == 3){  
  DOCUMENT.QUERYSELECTOR(".VICTORY").INNERHTML = "ПОБЕДИЛ " + USER;  
  DOCUMENT.QUERYSELECTOR(".VICTORY").STYLE.DISPLAY = "BLOCK";  
  VICTORYBEGIN(USER);  
}
```

## **FUNCTION VICTORY(METKA, USER)**

---

```
IF(D1 == 3 || D2 == 3){  
DOCUMENT.QUERYSELECTOR(".VICTORY").INNERHTML = "ПОБЕДИЛ " + USER;  
DOCUMENT.QUERYSELECTOR(".VICTORY").STYLE.DISPLAY = "BLOCK";  
VICTORYBEGIN(USER);  
    }  
}
```



## **FUNCTION VICTORY(METKA, USER)**

---

```
IF(SRT1 == 3 || SRT2 == 3 || SRT3 == 3 || ST1 == 3 || ST2 == 3 || ST3 == 3 || D1 == 3 || D2 == 3){  
RETURN 1;  
}
```

# FUNCTION VICTORYBEGIN(USER)

---

```
SETTIMEOUT(()=>{  
    DOCUMENT.QUERYSELECTOR(".VICTORY").STYLE.DISPLAY = "NONE";  
    LET CELLS = DOCUMENT.QUERYSELECTORALL(".CELL");  
    FOR (LET I = 0; I < CELLS.LENGTH; I++) {  
        CELLS[I].INNERHTML = "";  
    }  
    RAUND++;  
}
```

## FUNCTION VICTORYBEGIN(USER)

---

```
DOCUMENT.QUERYSELECTOR(".ROUND").INNERHTML = "РАУНД " + RAUND;  
IF(USER == "КОМПЬЮТЕР"){  
    VAR NUM = DOCUMENT.QUERYSELECTOR(".NUM_C").INNERHTML;  
    NUM++;  
    DOCUMENT.QUERYSELECTOR(".NUM_C").INNERHTML = NUM;  
}
```

# FUNCTION VICTORYBEGIN(USER)

---

```
    ELSE{  
        VAR NUM = DOCUMENT.QUERYSELECTOR(".NUM_U").INNERHTML;  
        NUM++;  
        DOCUMENT.QUERYSELECTOR(".NUM_U").INNERHTML = NUM;  
    }  
    M.LENGTH = 0;  
    M_X.LENGTH = 0;  
    M_O.LENGTH = 0;  
}, 2000);
```

# FUNCTION COMPUTER()

---

```
FUNCTION COMPUTER(){  
    LET NUMBER;  
    IF(M.LENGTH == 8){  
        NONEVICTORY(); }  
    NUMBER = MATH.FLOOR(MATH.RANDOM() * [8])+1;  
    DOCUMENT.GETELEMENTBYID(NUMBER).INNERHTML = "0";  
    M.PUSH(NUMBER);  
    M_O.PUSH(NUMBER);  
    VICTORY(M_O, "КОМПЬЮТЕР");}
```

# FUNCTION NONEVICTORY()

---

```
SETTIMEOUT(() =>{  
    DOCUMENT.QUERYSELECTOR(".VICTORY").INNERHTML = "НИЧЬЯ";  
    DOCUMENT.QUERYSELECTOR(".VICTORY").STYLE.DISPLAY = "BLOCK";  
}, 2000);  
SETTIMEOUT(() =>{  
    DOCUMENT.QUERYSELECTOR(".VICTORY").STYLE.DISPLAY = "NONE";  
    LET CELLS = DOCUMENT.QUERYSELECTORALL(".CELL");  
    FOR (LET I = 0; I < CELLS.LENGTH; I++) {  
        CELLS[I].INNERHTML = "";  
    }  
}
```

## FUNCTION NONEVICTORY()

---

**RAUND++;**

**DOCUMENT.QUERYSELECTOR(".ROUND").INNERHTML = "РАУЕД " + RAUND;**

**M.LENGTH = 0;**

**M\_X.LENGTH = 0;**

**M\_O.LENGTH = 0;**

**}, 2000);**



# ЗАДАНИЕ

**Сделать игру честной (компьютер не может ставить на клетки игрока)**

**Сделать игру честной (игрок не может внезапно победить)**

**Применить стили из предыдущих задний к объектам игры**

**Сделать подсветку разным цветом для клеток игрока и компьютера (Например красным и зеленым)**

**СПАСИБО ЗА ВНИМАНИЕ**

---

