

Logic Gates

```
const NAND = (x, y) => {  
  return !(x && y) ? 1 : 0;  
};
```

```
const NAND = (0, 0) => {  
  return !(not true && not true) ? 1 : 0;  -> 1/True.  
};
```

```
const NOT = (n) => {  
  return NAND(n, n);  
};
```

```
const NOT = (0) => {  
  return NAND(0, 0);  -> 1/True.  
};
```

```
const AND = (x, y) => {  
  return NAND(NAND(x, y), NAND(x, y));  
};
```

```
const AND = (1, 1) => {  
  return NAND(NAND(1, 1), NAND(1, 1));  
  NAND(0, 0)); -> True  
};
```

```
const OR = (x, y) => {  
  return NAND(NAND(x, x), NAND(y, y));  
};
```

```
const OR = (1, 0) => {  
  return NAND(NAND(1, 1), NAND(0, 0));  
  NAND(0, 1) -> True;  
};
```

```
const XOR = (x, y) => {  
  return NAND(NAND(x, NAND(x, y)), NAND(NAND(x, y),  
y));  
};
```

```
const XOR = (1, 0) => {  
  return NAND(NAND(1, NAND(1, 0)), NAND(NAND(1, 0),  
0));  
  NAND(NAND(1, 1), NAND(1, 0));  
  NAND(0, 1); -> True  
};
```