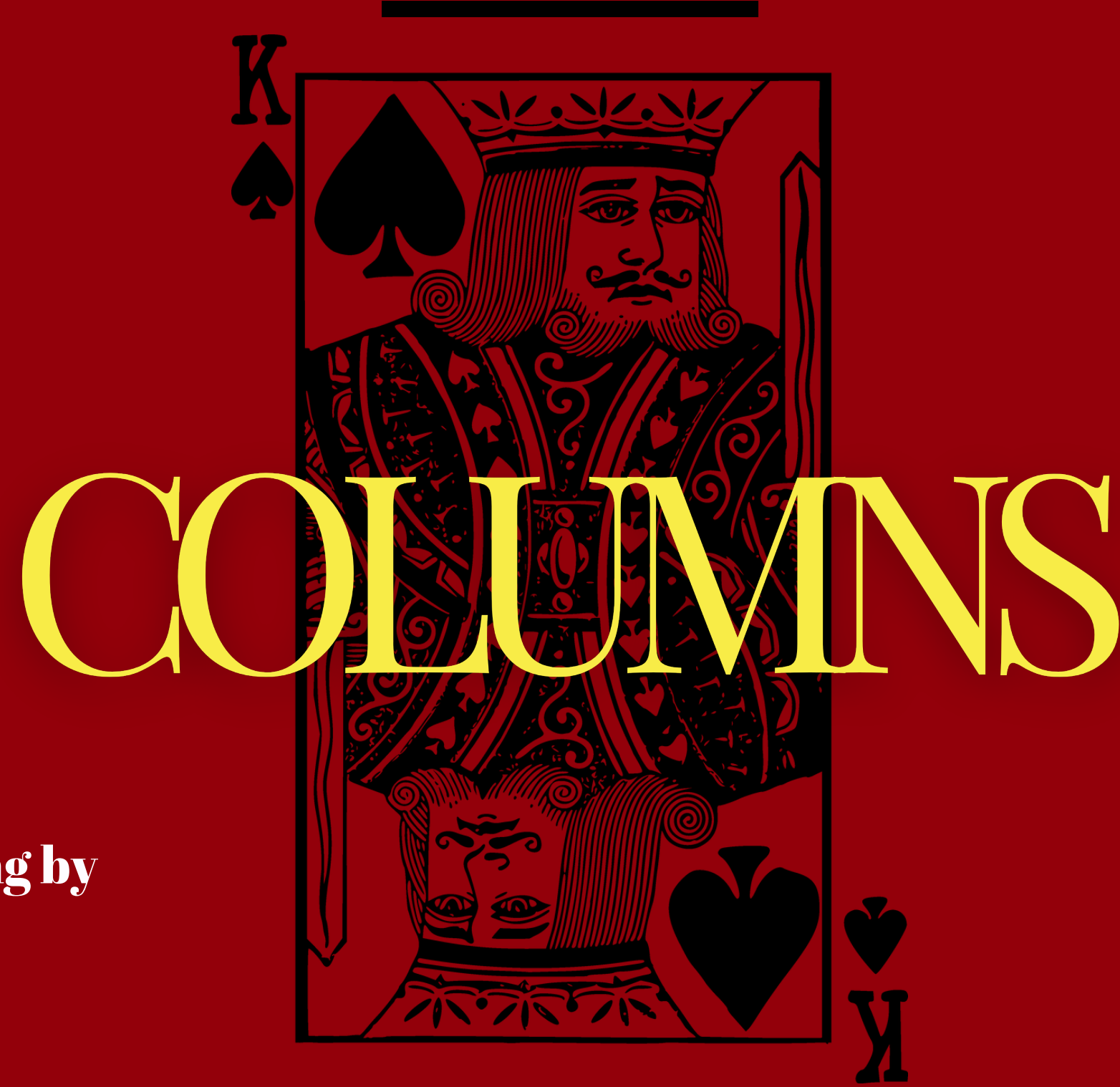


PROJECT-3 PRESENTATION



CME1252-Project Based Learning by

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**İZMİR
MAY,2022**



1

INTRODUCTION

2

PROGRESS SUMMARY

Requirements

Task Sharing

Scheduling

Completed Tasks

Incomplete Tasks: Reasons, Explanations

Additional Improvements

3

PROBLEMS ENCOUNTERED

4

ALGORITHMS AND SOLUTION STRATEGIES

5

SCREENSHOTS

6

CONCLUSION

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REFERENCES

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QUESTIONS



All Cards

1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

This game box contains 5 each of the numbers 1to10
Also, these cards are mixed in the box.

Mixed cards in the box

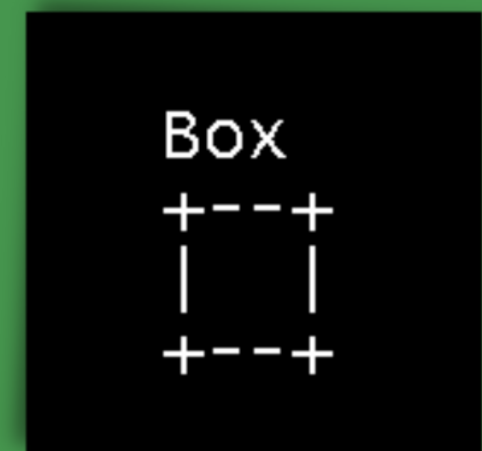
1 3 2 6 8 4 9 10 7 5
3 10 8 1 4 2 6 9 5 7
8 4 2 5 1 7 9 10 6 3
10 1 5 2 4 8 3 7 6 9
3 4 10 1 2 8 6 7 9 2



Shuffled Box



Number set: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
5 sets in total





5 columns

C1	C2	C3	C4	C5
--	--	--	--	--
1	3	2	6	8
4	9	10	7	5
3	10	8	1	4
2	6	9	5	7
8	4	2	5	1



The aim is reaching the highest score by collecting number sets



FOR PROJECT

Single Linked List
Double Linked List
Multi Linked List
Classes

Functions and Procedures

Enigma console

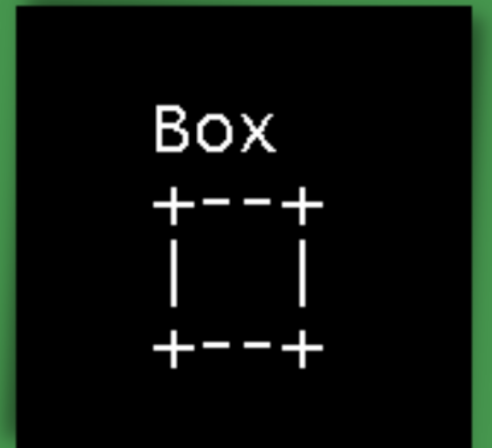
Loops, cases, if statements

Different kind of variables

Imported libraries



FOR GAME



C1	C2	C3	C4	C5
--	--	--	--	--
3	4	7	8	9
3	10	9	4	7
1	5	9	9	2
6	5	8	5	9
10	2	6	2	10
3	6	4	7	1

5 Columns
Numbers from 1 to 10
Shuffled Box
High Score Table
Shuffled Box



MUSTAFA
EREN

Designing game screen
First number distribution
Z Key
Columns
Transfer operations

CEREN

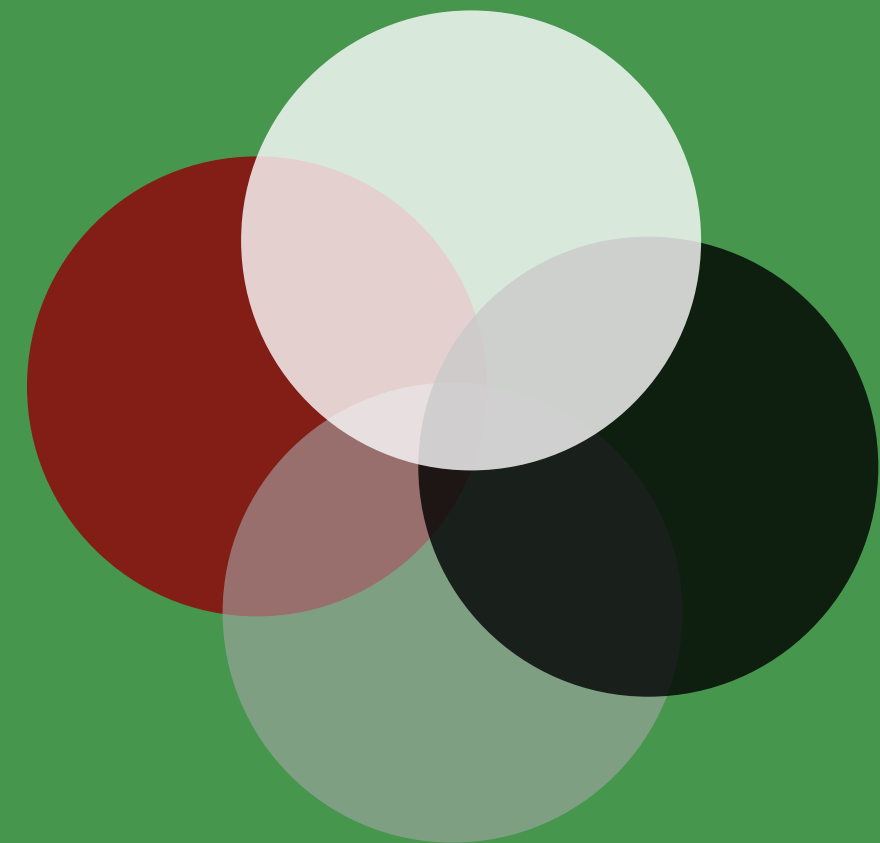
Box
DLL class
High Score Table
End game conditions and score

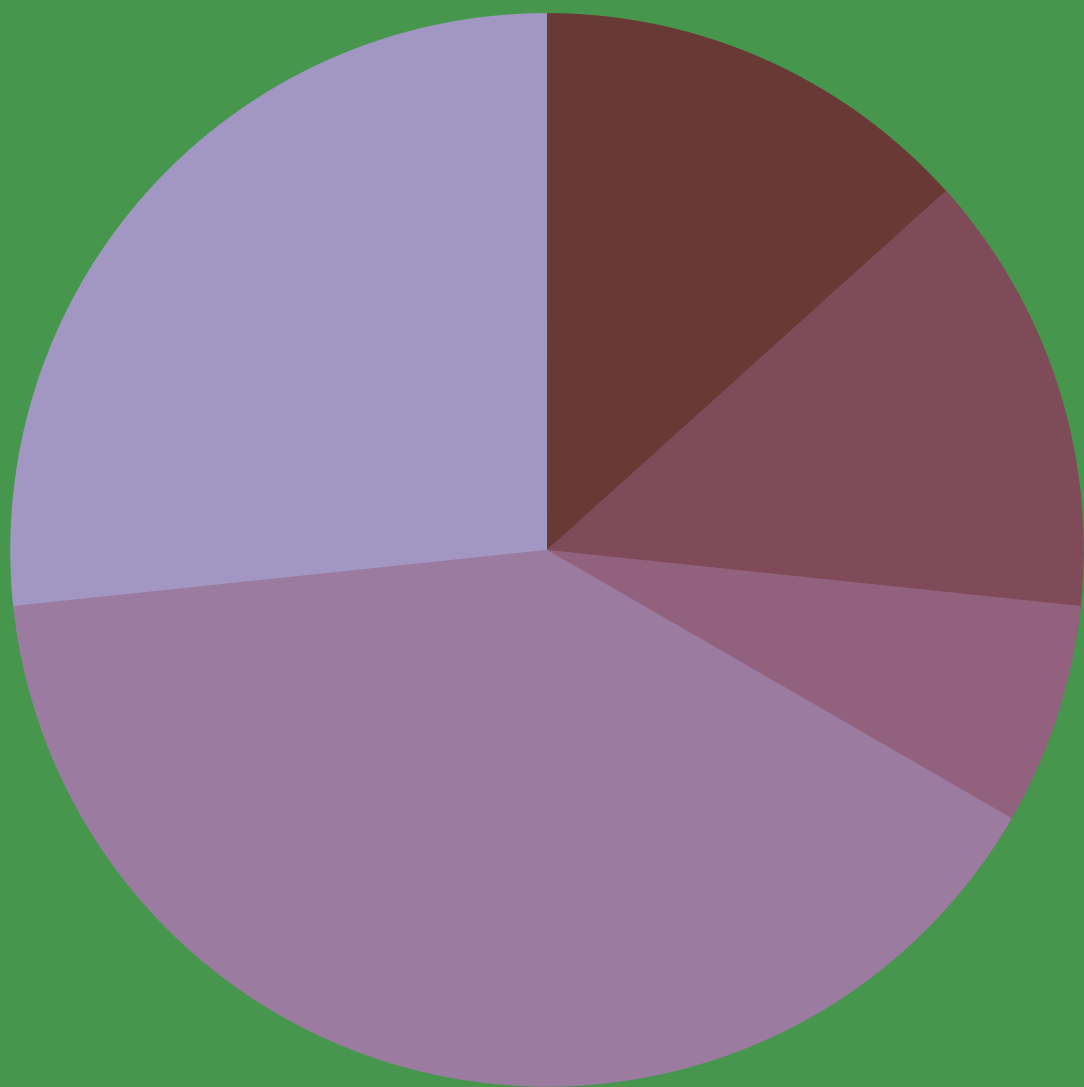
EREN

MLL class
Printing the Screen
B,X and Arrow Keys
Transfer Conditions

MELİH

Game Screen
Game info
Sound Effects
Transfer Conditions





WEEK 1

- Design of classes
- Data structures
- Screen
- Load operations

WEEK 2

- Box implementation
- Initial distribution
- High Score Table

WEEK 3

- No Progress Made

WEEK 4

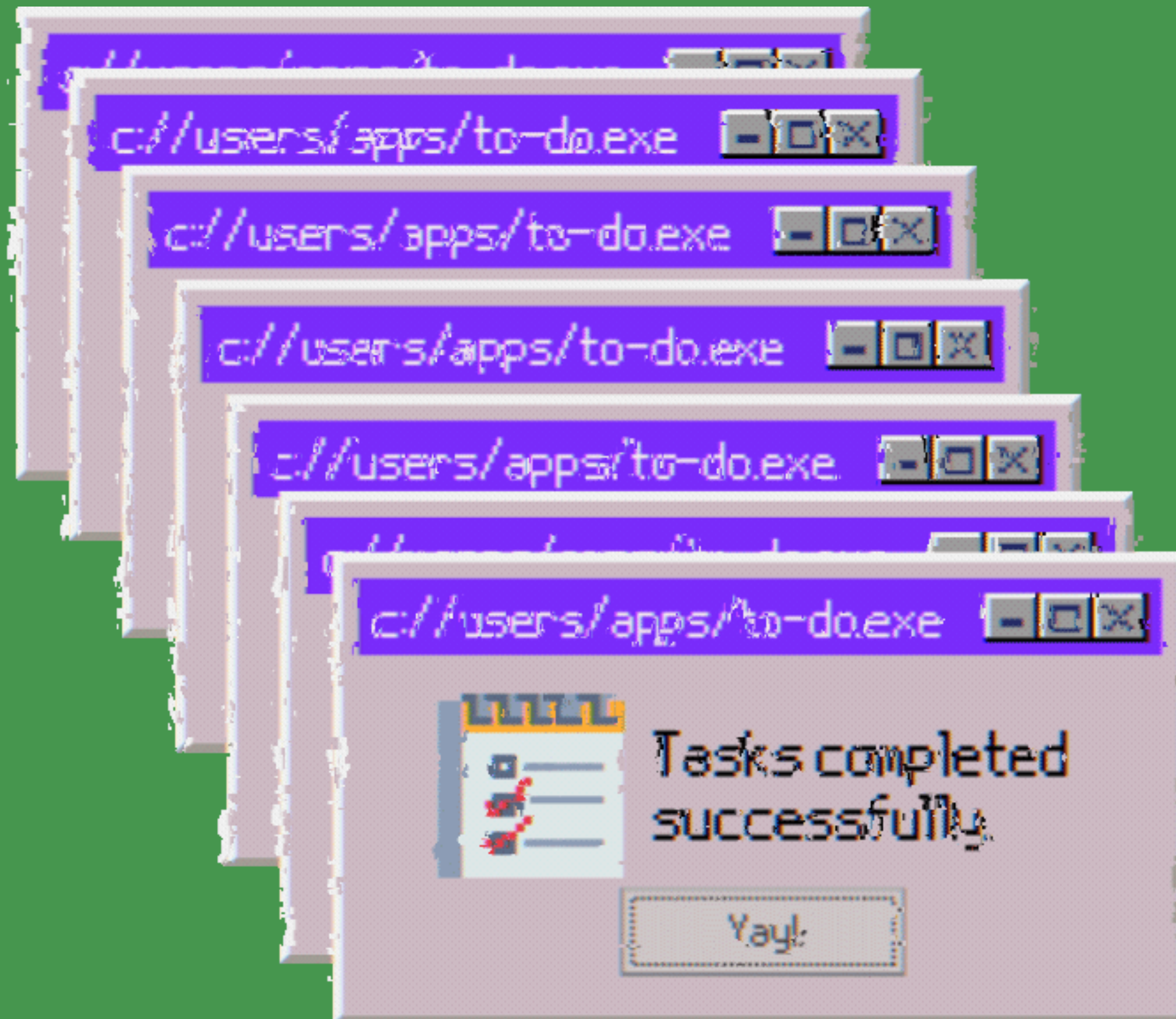
- Columns
- Transfer operations
- Arrow keys

WEEK 5

- Remaining parts of the game
- Debugging
- Testing

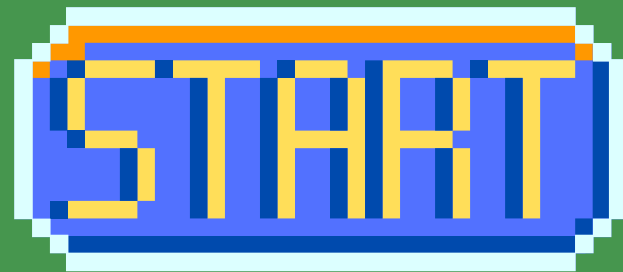


Designing Classes
Designing Data Structures
Screen
Load Operations
Box Implementation
Initial Number Distribution
High Score Table
Columns
Transfer Operations

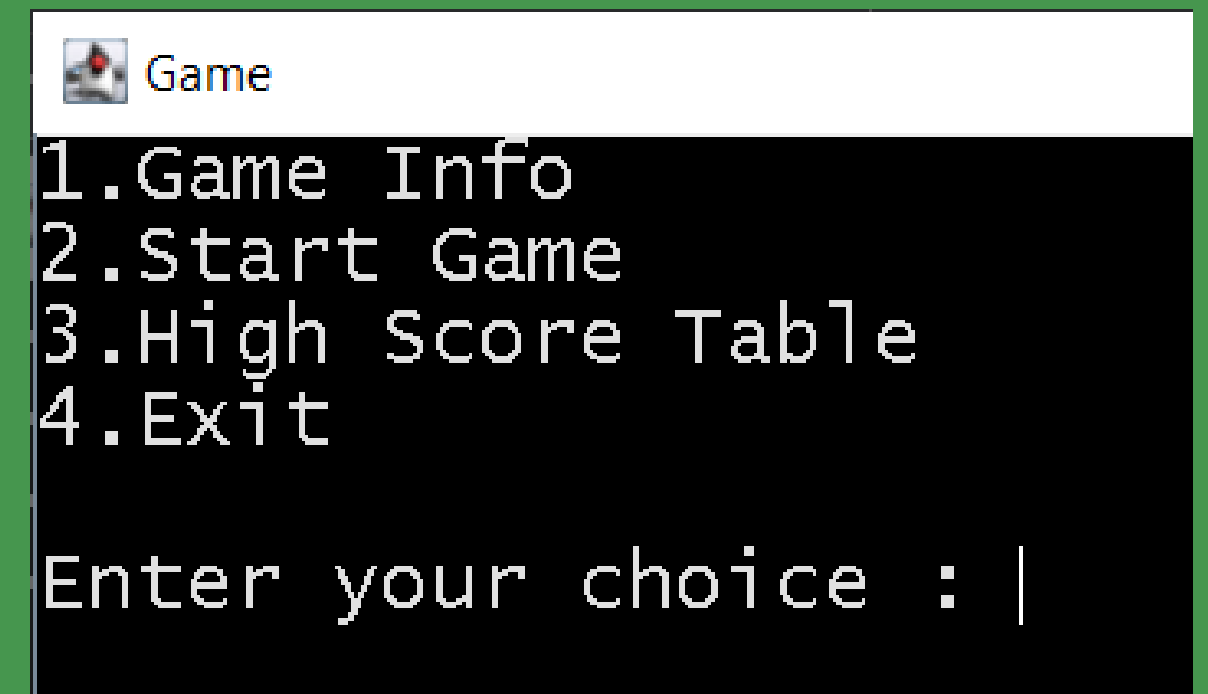




SOUND EFFECTS



GAME MENU



GAME INFO





MOVE TO **EMPTY** COLUMN

MOVE ELEMENT TO **EMPTY** COLUMN

Game						
C1	C2	C3	C4	C5	Transfer	: 15
--	--	--	--	--	Score	: 0
10		6	1	6	Box +--+ +--+	
9		6	8	4		
8		3	8	2		
		3	1	10		
			9	7		
			8	7		
			7	6		
			6			
			5			
			4			
			3			
			2			
			1			
			1			
			2			
			1			

ERROR



SHUFFLE THE BOX

```
randomForBox(s11) {  
  from 1 to 50 {  
    creating a random number (1-s11Size)  
    from 1 to random number {  
      temp = temp.getLink up to the random number  
    }  
    add temp to mixedBox  
    delete temp from the s11  
    decrease the s11Size  
  }  
}
```

Pseudocode



10 SET CONTROL

```
isset10() {  
    navigate the columns  
    navigate the elements in the checked column  
    if(current column size equals to 10) {  
        difference = current number - previous number  
        if(difference == 1 along this column or  
           difference == -1 along this column){  
  
            condition is true  
            break  
  
        }  
    }  
    if (condition is true)  
        return current column number  
  
    else  
        return 0  
}
```

Pseudocode



TRANSFER OPERATIONS

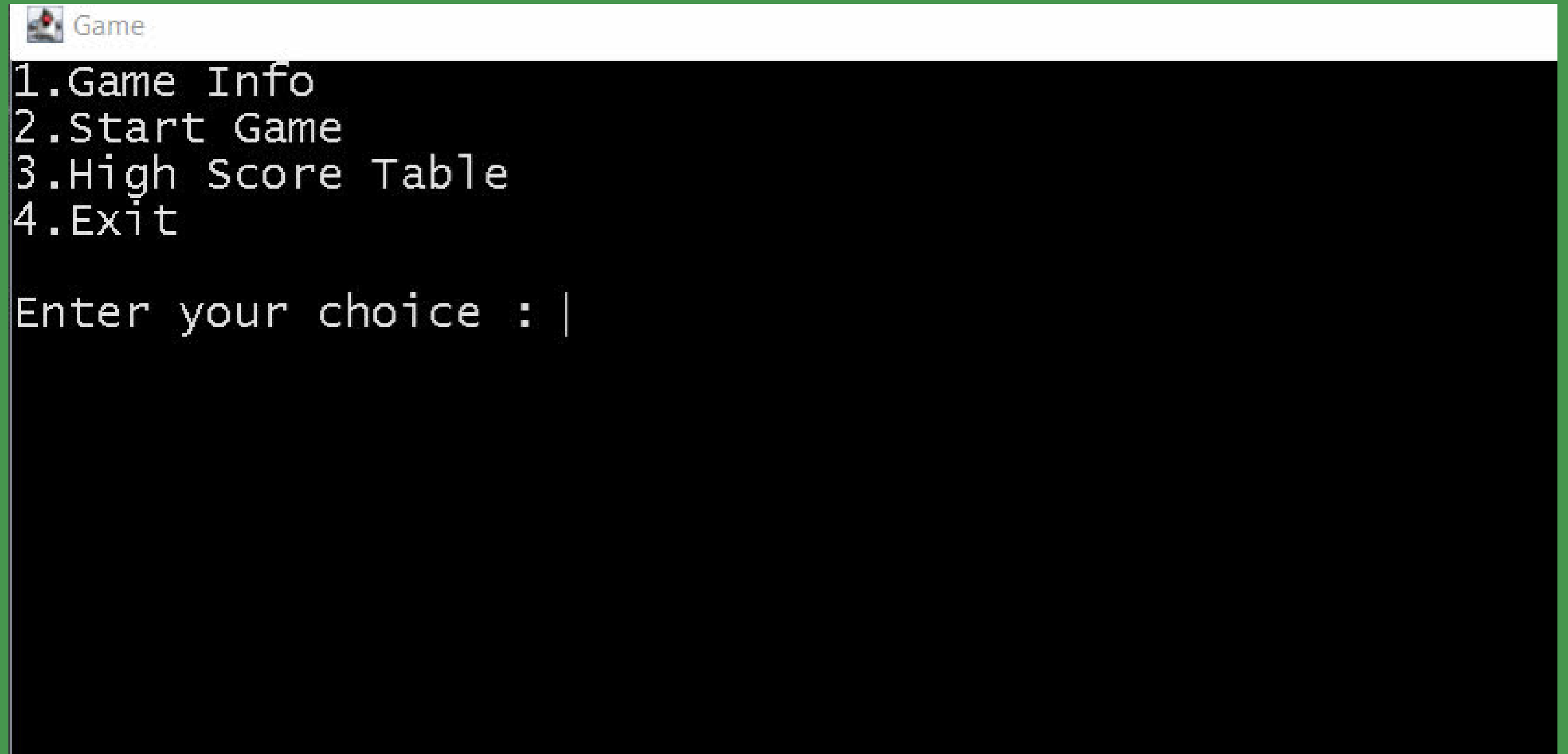
```
transferRemover(m11, column, height) {  
    temp = m11.head  
    tempE = null  
    isChosenRight = true  
    for each i from 0 to column-1 {  
        temp = temp.getDown  
    }  
    tempE = temp.getRight()  
    for each i from 0 to height-2 {  
        tempE = tempE.getNext  
    }  
    set tempE.Next to null  
    if elementSize(column) equals to 1 and height equals to 1  
        set temp.Right to null  
}
```

```
transferAdder(m11, column, s11) {  
    temp = s11.head  
    while temp is not equal to null {  
        m11.addElement(column, temp.getData)  
        if temp.getLink is not equal to null  
            temp = temp.getLink  
        else  
            exit the loop  
    }  
}
```

Pseudocode



GAME INFO





MAKING SET OF 10

Game						
C1	C2	C3	C4	C5	Transfer	: 12
--	--	--	--	--	Score	: 0
5	9	4	5			
4	8	1	10			
8	5	2	1		Box	
7		8			+--+	Z key: OFF
9		2			1	
4		10			+--+	
5		9				
6		8				
3		7				
2		6				
6		5				
7		4				
8		3				
9		2				
		1				



C1	C2	C3	C4	C5	Transfer	: 11
--	--	--	--	--	Score	: 0
10	1	6	10	3		
10	7	7	2	4		
10	8	5	9	4	Box	
9		2	6	2	+- - +	
8		4	7	5		
7		9	8		+- - +	
6		5	1			
5		4	2			

DRAWING
ELEMENT
FROM THE
BOX



Game

C1	C2	C3	C4	C5	Transfer	:	0
--	--	--	--	--	Score	:	0
6	9	9	1	7			
2	8	6	3	5			
1	10	4	4	4	Box		
3	3	7	6	8	+--+		
2	7	8	10	6			
4	2	6	4	1	+--+		

MOVING IN
AND
BETWEEN
COLUMNS



THE PROJECT WAS
COMPLETED SUCCESSFULLY
AND EARLIER THAN THE
REQUESTED
TIME, AND NEW ADDITIONS
WERE MADE.

100%



- [1] Playing audio File in Eclipse. (2017, May 16). Stack Overflow.
- [2] patorjk.com. (n.d.). Patorjk. Retrieved May 22, 2022.



ANY
QUESTIONS?