CCE 103 - FINAL PROJECT

Java

Compilation

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Fibonacci Series

The Fibonacci series is a sequence of numbers where a number is the addition of the last two numbers, starting with 0 and 1. Here is example implement Fibonacci series code in Java.

// Example:

```java
import java.util.Scanner;

public class FibonacciSeries {
    Run | Debug
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        int misyona;
        int firstNumber = 0;
        int secondNum = 1;

        System.out.println(x:"imong result badi:");
    for (int num = 0; num <= 8; num++) {
        System.out.println(firstNumber);

        misyona = firstNumber + secondNum;
        firstNumber = secondNum;
        secondNum = misyona;


    }


}

}
```

// Output:

```
f:\kitlami.java\activities - VS Code Console
imong result badi:
0
1
1
2
3
5
8
13
21
```

Resibo Activity 1

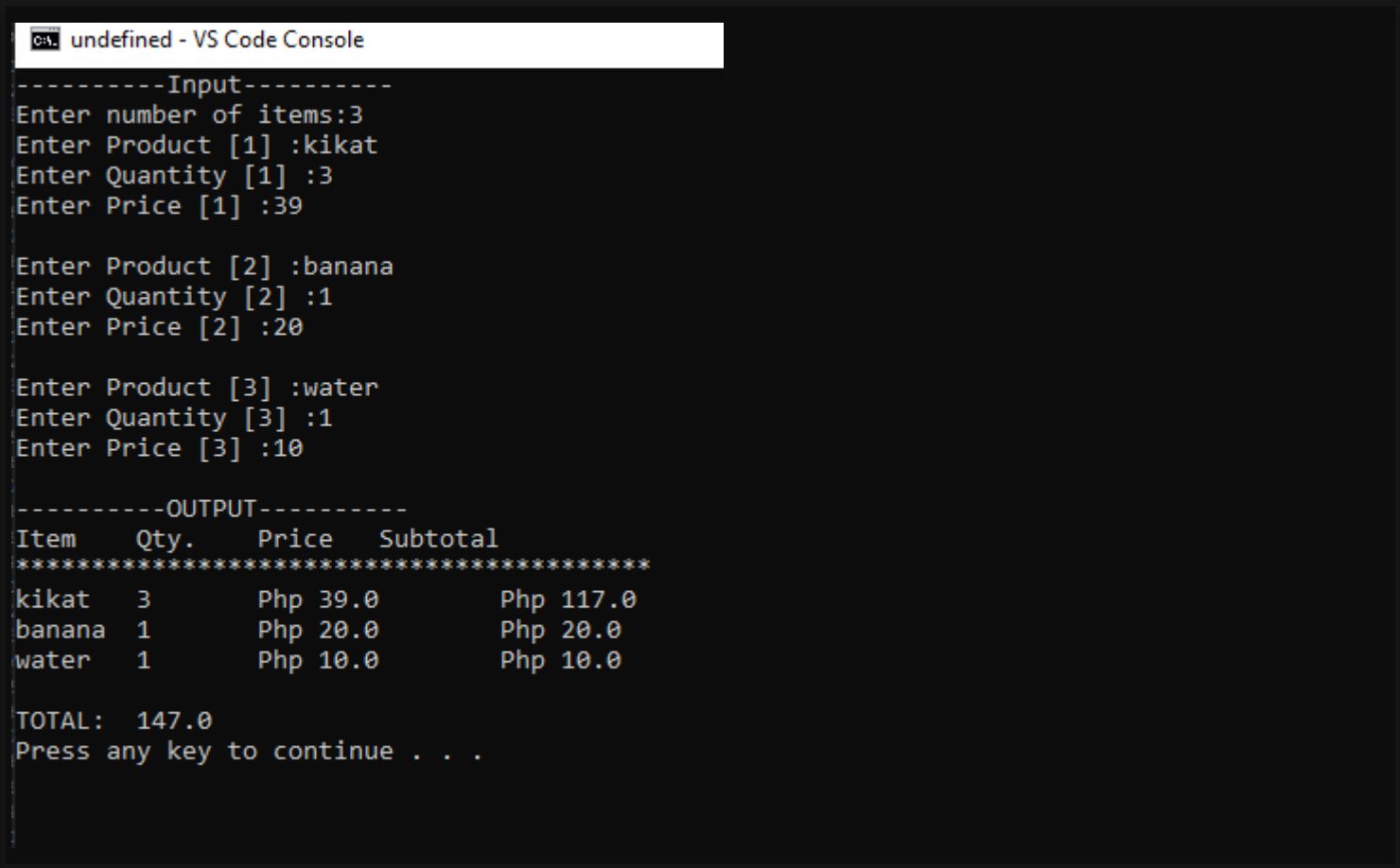
This Java code is a simple console application that calculates the total cost of products based on user input. The program uses the Scanner class to read input from the user and an array to store the product information.

// Example:

```java
import java.util.Scanner;

public class PANAGSAGAN_resibo1 {
    Run | Debug
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        String jerhoMethod = "----------";
        String asteristk = "****************************************";
        // ask the user size of the array
        System.out.println(jerhoMethod+"Input"+ jerhoMethod);
        System.out.print(s:"Enter number of items:");
        int size = scanner.nextInt();

        double TOTAL = 0;
        // Create an array
        String[] productItem = new String[size];
        int[] productQuantity = new int[size];
        double[] productPrice = new double[size];
        double[] subTotal = new double[size];
        // Take input each from the user
        for (int i = 0; i < size; i++) {
            System.out.print("Enter Product " + "[" +(i + 1)+ "] " + ":");
            productItem[i] = scanner.next();

            System.out.print("Enter Quantity " + "[" +(i + 1)+ "] " + ":");
            productQuantity[i] = scanner.nextInt();

            System.out.print("Enter Price " + "[" +(i + 1)+ "] " + ":");
            productPrice[i] = scanner.nextDouble();

            System.out.println(x:"");

        }
        //calculation haha
                //loop for calculation

        for (int i = 0; i < size; i++) {
            subTotal[i] = productPrice[i]*productQuantity[i];  //calculation
        }
        // Display the elements of the array
        System.out.println(jerhoMethod+"OUTPUT"+ jerhoMethod);
        System.out.println(x:"Item\tQty.\tPrice\tSubtotal");
        System.out.println(asteristk);

        for (int i = 0; i < size; i++) {

        System.out.println(productItem[i]+"\t"+productQuantity[i]+"\tPhp "+productPrice[i]+"\tPhp "+subTotal[i]+"\t");

        }
        // Total

        for (int i = 0; i < size; i++) {
        TOTAL += subTotal[i];  //calculation
        }
        System.out.println("\nTOTAL:\t" + TOTAL);

    }
```

/*The code is well-organized and easy to understand, with clear comments and formatting. The use of arrays and loops makes it easy to handle multiple products and calculate the total cost. Overall, this is a good example of a simple Java console application. *\

// Output:



Resibo Activity 2

The code provided is a simple implementation of a cash register system in a store. It takes input from the user for the number of items they want to purchase, the product name, quantity, and price for each item. It then calculates the subtotal for each item (quantity multiplied by price), the total amount (sum of all subtotals), and the VAT (5% of the total amount). It also asks the user to enter the payment amount and calculates the change.

// Example:

```java
import java.time.LocalDate;
import java.util.Scanner;

public class PANAGSAGAN_resibo2 {
    Run | Debug
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        // Constants for formatting
        String jerhoMethod = "----------";
        String asteristk = "****************************************";
        String line      = "----------------------------------------";
        System.out.println(x:"\tPURCHASE RECEIPT SYSTEM");
        System.out.println(x:"\tINPUT DETAILS BELOW");
        System.out.println(asteristk);
        LocalDate myObj = LocalDate.now();
        //ask user cashier and o.r
        System.out.print(s:"Enter Cashier Name:\t");
        String name = scanner.nextLine();

        System.out.print(s:"Enter O.R. No:\t\t");
        int ornum = scanner.nextInt();
        System.out.println(asteristk);
        // ask the user size of the array
        System.out.print(s:"Enter number of items:\t");
        int size = scanner.nextInt();
        System.out.println(asteristk);
        // Create an array
        String[] productItem = new String[size];
        int[] productQuantity = new int[size];
        double[] productPrice = new double[size];
        double[] subTotal = new double[size];
        // Take input each from the user
        for (int i = 0; i < size; i++) {
            System.out.print(s:"Enter Product:\t\t");
            productItem[i] = scanner.next();

            System.out.print(s:"Enter Quantity:\t\t");
            productQuantity[i] = scanner.nextInt();

            System.out.print(s:"Enter Price:\t\t");
            productPrice[i] = scanner.nextDouble();
            System.out.println(line);
        }
        //calculation haha
                //loop for calculation
        for (int i = 0; i < size; i++) {
            subTotal[i] = productPrice[i]*productQuantity[i];  //calculation
        }
        // calculate Total of the items
        double TOTAL = 0.0;
        for (int i = 0; i < size; i++) {
        TOTAL += subTotal[i];  //calculation
        }
```

```
        System.out.println("\nTOTAL PAYMENT:\t" + TOTAL);
        // askin user payment for item
        int customerPayment = 0;
        do {
            System.out.print(s:"Enter Customer Payment:");
            customerPayment = scanner.nextInt();
        } while (customerPayment < TOTAL);


        System.out.println(x:"\n\n\n");

        // Print store information
        System.out.println(x:"   Gaisano Grand Mall");
        System.out.println(x:"  Mc Arthur Highway, Digos City");
        System.out.println(x:"  Tel. #: 553-2847 Fax: 679652382");
        System.out.println(x:"  GST Reg. No. 00023648294");
        System.out.println(x:"  RCB: 529873290");
        System.out.println();

        // Print receipt details
        System.out.println(x:"    PURCHASE RECEIPT");
        System.out.println("cashier: " + name);
        System.out.println(myObj+"\t\t" + "O.R. No.: " + ornum);
        System.out.println(asteristk);
        System.out.println(x:"Item\tQty.\tPrice\t\tSubtotal");

        System.out.println(line);


        // Print details for each item
        for (int i = 0; i < size; i++) {
            System.out.println(productQuantity[i]+"\t"+productItem[i]+"\tPhp "+productPrice[i]+"\t"+ subTotal[i]);
            }
        System.out.println(asteristk);
        // Calculate and print VAT, total, and change
        double vat = 0.05;
        double tax = TOTAL * vat;
        double finalTotal = subTotal[0] + tax;
        double finalfinaldouble = subTotal[0];
        System.out.println("Subtotal\t" + TOTAL);

        System.out.println("VAT(5%)\t\t" +tax);
        System.out.println(x:"");
        System.out.println("TOTAL\t\t" +(TOTAL+tax));
        System.out.println(x:"");
        System.out.println("CASH\t\t" +customerPayment);


        double change =  customerPayment - finalTotal;
        System.out.println("CHANGE\t\t" +(customerPayment-(TOTAL+tax)));
            System.out.println(x:"");

        System.out.println(x:"\t\tTHANK YOU FOR SHOPPING!");
    }
```

// Output:

```
        PURCHASE RECEIPT SYSTEM
        INPUT DETAILS BELOW
*****************************************
Enter Cashier Name:     kit
Enter O.R. No:          595959
*****************************************
Enter number of items:  3
*****************************************
Enter Product:          KitKat
Enter Quantity:         3
Enter Price:            39
-----------------------------------------
Enter Product:          water
Enter Quantity:         1
Enter Price:            10
-----------------------------------------
Enter Product:          milk
Enter Quantity:         2
Enter Price:            59
-----------------------------------------

TOTAL PAYMENT:  245.0
Enter Customer Payment:200
Enter Customer Payment:300


   Gaisano Grand Mall
  Mc Arthur Highway, Digos City
  Tel. #: 553-2847 Fax: 679652382
  GST Reg. No. 00023648294
  RCB: 529873290

    PURCHASE RECEIPT
cashier: kit
2024-03-05              O.R. No.: 595959
*****************************************
Item    Qty.    Price           Subtotal
-----------------------------------------
3       KitKat  Php 39.0        117.0
1       water   Php 10.0        10.0
2       milk    Php 59.0        118.0
*****************************************
Subtotal        245.0
VAT(5%)         12.25

TOTAL           257.25

CASH            300
CHANGE          42.75

                THANK YOU FOR SHOPPING!
Press any key to continue . . .
```

array Excercise1

In this code, the user is asked to enter the size of the array. Then, the program creates an array of integers of the specified size and asks the user to enter each element of the array. Finally, the program categorizes and prints the odd and even numbers from the array.

// Example:

```java
import java.util.Scanner;

public class arrayExercise1 {// categorizing odd and even
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // ask the user size of the array
        //System.out.print("Enter the size of the array: ");

        //int size = scanner.nextInt();
        int size = 10;

        // Create an array
        int[] intArray = new int[size];

        // Take input each from the user
        for (int i = 0; i < size; i++) {
            System.out.print("Enter a number " + (i + 1) + ":\t");
            intArray[i] = scanner.nextInt();
        }
        System.out.println(" ");


        // Display the odd
        System.out.println("Odd numbers:");
        for(int i = 0 ; i < size ; i++)
        {
            if(intArray[i] % 2 != 0)
            {
                System.out.print(intArray[i]+" ");
            }
        }
        System.out.println(" ");


       // Display the even
        System.out.println("Even numbers:");
        for(int i = 0 ; i < size ; i++)
        {
            if(intArray[i] % 2 == 0)
            {
                System.out.print(intArray[i]+" ");
            }
        }




    }
}
```

//Output:

```
Enter a number 1:       2
Enter a number 2:       3
Enter a number 3:       4
Enter a number 4:       5
Enter a number 5:       6
Enter a number 6:       7
Enter a number 7:       8
Enter a number 8:       9
Enter a number 9:       0
Enter a number 10:      8

Odd numbers:
3 5 7 9
Even numbers:
2 4 6 8 0 8 Press any key to continue .
```

Array Excercise2

In this code, the program is designed to create an array of integers and display it in a tabular format.

// Example:

```java
import java.util.Scanner;

public class arrayExercise2 { // basta katong choi
    Run | Debug
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);


        String asteristk = "****************************************";
        String line      = "----------------------------------------";
        int[] intArray = {1, 8, 10, 7, 4, 112, 43, 144, 18, 11,};


        // make array
        for (int i = 0; i < 10; i++) {
            System.out.print("\t" + (i));

        }
        System.out.println(x:"");
        System.out.println(line + line);

        for (int i = 0; i < 10; i++) {
            System.out.print("|\t" + intArray[i]);
            if (i == 9)    {
            System.out.print(s:"|\t");
            }
        }
        System.out.println(x:"");
        System.out.println(line+ line);

    }
}
```

// Output:

```
undefined - VS Code Console
        0       1       2       3       4       5       6       7       8       9
--------------------------------------------------------------------------------
|       1|      8|      10|     7|      4|      112|    43|     144|    18|     11|
--------------------------------------------------------------------------------
Press any key to continue . . .
```

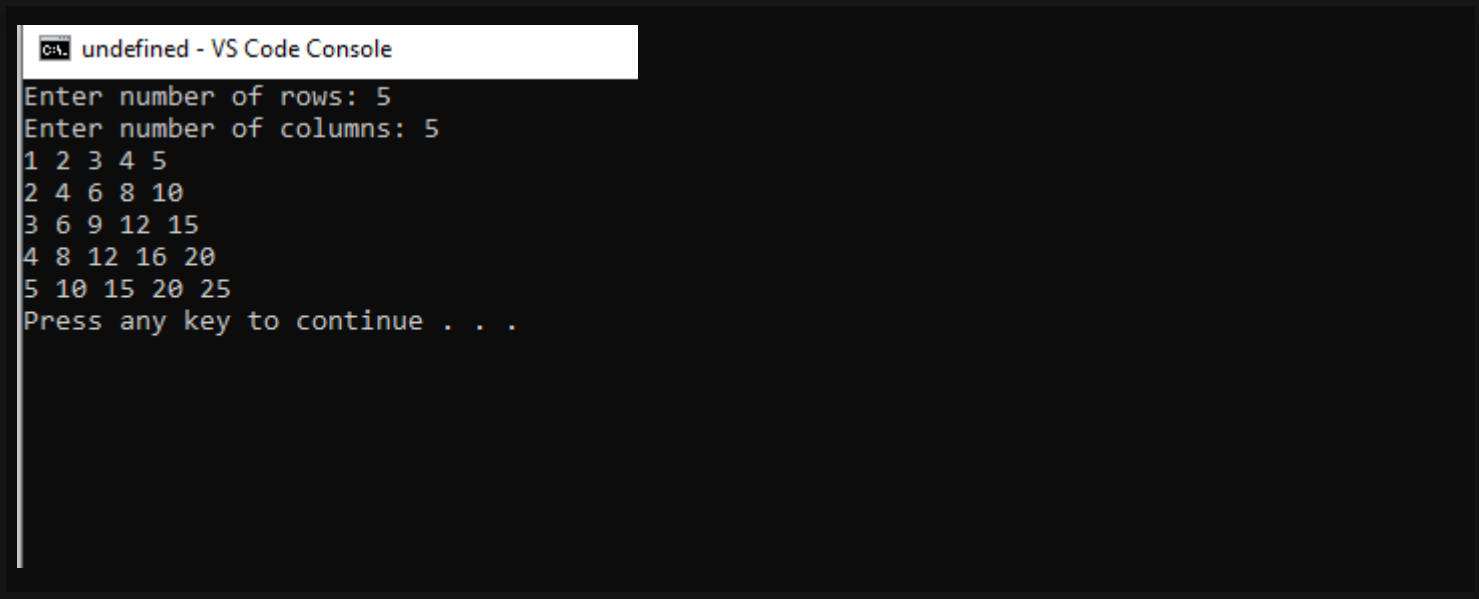
Array Excercise3

This Java program creates a multiplication table based on user input for the number of rows and columns.

// Example:

```java
import java.util.Scanner;
public class arrayExercise3 {

        public static void main(String[] args)  { // multiplication table

            Scanner scan = new Scanner(System.in);

            System.out.print("Enter number of rows: ");
            int rows = scan.nextInt();

            System.out.print("Enter number of columns: ");
            int columns = scan.nextInt();

            int[][] mulTable= new int[rows][columns];


            for (int repetion = 0; repetion < rows; repetion++) {
                for (int j = 0; j < columns; j++) {
                    mulTable[repetion][j]= (repetion + 1) * (j + 1);
                }
            }
            for (int repetion = 0; repetion < rows; repetion++) {
                for (int j = 0; j < columns; j++) {
                    System.out.print(mulTable[repetion][j]+ " ");
                }

                System.out.println();
            }



        }
    }

```

// Output:


undefined - VS Code Console
Enter number of rows: 5
Enter number of columns: 5
1 2 3 4 5
2 4 6 8 10
3 6 9 12 15
4 8 12 16 20
5 10 15 20 25
Press any key to continue . . .

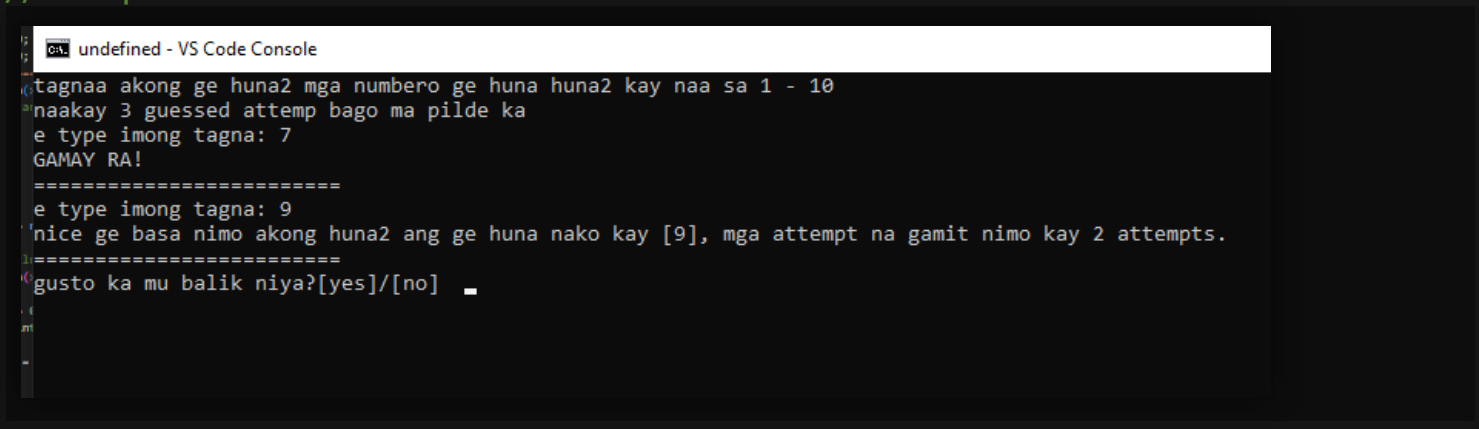
Number GuessGame2

This Java program implements a simple number guessing game where the user has to guess a random number between 1 and 10 within three attempts.

// Example:

```java
import java.util.InputMismatchException;
import java.util.Random;
import java.util.Scanner;

public class NumberGuessGame2 {
    Run | Debug
    public static void main(String[] args) {
        Random random = new Random();
        Scanner kitscanner = new Scanner(System.in);

        String askUserToContinue = "";
        int finalGuess = 0;
        int numGuesses = 0;
        String line = "------------------------";
        System.out.println(x:"tagnaa akong ge huna2 mga numbero ge huna huna2 kay naa sa 1 - 10 ");
        //  int range = scanner.nextInt();


        try{

        do {

        int randomNumber = random.nextInt(bound:10) + 1;

        //System.out.println("gebuhat nako numbero 1 and 10");
        System.out.println(x:"naakay 3 guessed attemp bago ma pilde ka");

        for (int attempt = 0; attempt < 3; attempt++) {
            System.out.print(s:"e type imong tagna: ");

            int userGuess = kitscanner.nextInt();
            numGuesses++;
                        if (userGuess < randomNumber) {
                            System.out.println(x:"GAMAY RA!");
                            System.out.println(line);
                        } else if (userGuess > randomNumber) {
                            System.out.println(x:"TAAS RA");
                            System.out.println(line);
                        } else if(userGuess== randomNumber) {
                            System.out.println("nice ge basa nimo akong huna2 ang ge huna nako kay [" + randomNumber
                            + "], mga attempt na gamit nimo kay " + numGuesses + " attempts.");
                            System.out.println(line);
                            attempt = 3;
                        }
                        finalGuess = userGuess;
                    }

        if (finalGuess != randomNumber) {
            System.out.println("hahahaha miss na kita, number na wala na ge gussed nimo " + randomNumber + ".");
            }



                    System.out.print(s:"gusto ka mu balik niya?[yes]/[no]  ");
                    askUserToContinue = kitscanner.next();
                    System.out.println(x:"");
        }while(askUserToContinue.equalsIgnoreCase(anotherString:"yes"));
        System.out.println(x:"exiting program");
        }

        catch(InputMismatchException e ){
            System.out.println(x:"nuimber ra ibutang na sugod og 1 - 10 tsk");
        }

    }
}
```

// Output:


undefined - VS Code Console
tagnaa akong ge huna2 mga numbero ge huna huna2 kay naa sa 1 - 10
naakay 3 guessed attemp bago ma pilde ka
e type imong tagna: 7
GAMAY RA!
==========
e type imong tagna: 9
nice ge basa nimo akong huna2 ang ge huna nako kay [9], mga attempt na gamit nimo kay 2 attempts.
==========
gusto ka mu balik niya?[yes]/[no]

Radomizer

This Java program generates a random password of a specified length.

// Example

```java
import java.util.Random;
import java.util.Scanner;

public class radomizer {
    Run | Debug
    public static void main(String args[]) {
        Random random = new Random();
        Scanner scanner = new Scanner(System.in);
        char[] alpha = {'A','B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W','X',
        'Y','Z','a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','x','y','z','0','1','2','3','4','5','6','7','8','9',};

        try {
            String sagotMo = "";
            System.out.println(x:"Gusto mo ng random na password?");
            System.out.println(x:"Type 'oo'");
            sagotMo = scanner.nextLine();

            if (sagotMo.equalsIgnoreCase(anotherString:"oo")) {
                System.out.print(s:"How many characters for your password: ");
                int length = scanner.nextInt();
                scanner.nextLine();

                StringBuilder sb = new StringBuilder();
                for (int i = 0; i < length; i++) {
                    int randomNumber = random.nextInt(alpha.length);
                    sb.append(alpha[randomNumber]);
                }

                System.out.println("Your random password is: " + sb.toString());
            }
        } catch (Exception e) {
            System.out.println("Error: " + e.getMessage());
        }

        System.out.println(x:"");
    }
}
```

// Output:

```
undefined - VS Code Console
Gusto mo ng random na password?
Type 'oo'
oo
How many characters for your password: 8
Your random password is: n13muaX4
```

Random Name

This Java program randomly selects a name from an array of names and prints it as the winner of a lucky draw.

// Example:

```
import java.util.Random;
import java.util.Scanner;

    public class randomPassword {
    Run | Debug
    public static void main(String args[]) {
    Random random = new Random();
    Scanner scanner = new Scanner(System.in);
    char[] alpha = {'A','B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W','X',
    'Y','Z','a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','x','y','z','0','1','2','3','4','5','6',
    '7','8','9',};

    try{
    String sagotMo = "";
    System.out.println(x:"gusto kag random na pasword? ");
    System.out.println(x:"typed oo ");
    sagotMo = scanner.nextLine();

if(sagotMo.equalsIgnoreCase(anotherString:"oo")){
    System.out.print(s:"dara password nimo kol: ");
        for(int looper = 0; looper < 8; looper++){
            int randomNumber = random.nextInt(alpha.length);
            System.out.print(alpha[randomNumber]);
                                                }
                                                }
            }

        catch(Exception e)  {
            System.out.println(x:"bobo");
        }
        System.out.println(x:"");
            }
        }
```

// Output:

```
undefined - VS Code Console
**********************************************************************
Lucky winner draw

to proceed type ye:     ye
----------------------------------------------------------
winner is Clariedhel
```

Random Password1

This Java program generates a random password of length 8 when the user inputs "oo" in response to the question if they want a random password.

// Example:

```java
import java.util.Random;
import java.util.Scanner;

    public class randomPassword {
    Run | Debug
    public static void main(String args[]) {
    Random random = new Random();
    Scanner scanner = new Scanner(System.in);
    char[] alpha = {'A','B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W','X',
    'Y','Z','a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','x','y','z','0','1','2','3','4','5','6',
    '7','8','9',};

    try{
    String sagotMo = "";
    System.out.println(x:"gusto kag random na pasword? ");
    System.out.println(x:"typed oo ");
    sagotMo = scanner.nextLine();

if(sagotMo.equalsIgnoreCase(anotherString:"oo")){
    System.out.print(s:"dara password nimo kol: ");
        for(int looper = 0; looper < 8; looper++){
            int randomNumber = random.nextInt(alpha.length);
            System.out.print(alpha[randomNumber]);
                                        }
                                        }
            }

        catch(Exception e)  {
            System.out.println(x:"bobo");
        }
        System.out.println(x:"");
            }
        }
```

// Output:

```
undefined - VS Code Console
gusto kag random na pasword?
typed oo
oo
dara password nimo kol: t1xRKXOi
Press any key to continue . . .
```

Random Password2

This Java program generates a random password of length 8 with a specific pattern when the user inputs "oo" in response to the question if they want a random password.

// Example:

```java
import java.util.Random;
import java.util.Scanner;

    public class randomPassword2 {
    Run | Debug
    public static void main(String args[]) {
    Random random = new Random();
    Scanner scanner = new Scanner(System.in);
    char[] smollet = {'a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','x','y','z',};
    char[] BIGletters = {'A','B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W','X',
    'Y','Z',};
    char [] numbers = {'0','1','2','3','4','5','6','7','8','9',};

    try{

    String sagotMo = "";
    System.out.println(x:"gusto kag random na pasword? ");
    System.out.print(s:"typed oo:\t");
    sagotMo = scanner.nextLine();

    if(sagotMo.equalsIgnoreCase(anotherString:"oo")){
    System.out.print(s:"dara password nimo kol: ");
    int length = 8;

    for(int looper = 0; looper < length; looper++){

    if(looper < 2){
        int randomNumber2 = random.nextInt(numbers.length);
        System.out.print(numbers[randomNumber2]);
                }
    else if(looper < 3){
        int randomNumber1 = random.nextInt(BIGletters.length);
        System.out.print(BIGletters[randomNumber1]);
                }
    else if(looper < 8){
        int randomNumber0 = random.nextInt(smollet.length);
       System.out.print(smollet[randomNumber0]);
                }
    }
    }
System.out.println("");
    }
catch(Exception e)  {
    System.out.println(x:"error\n type oo ");
}

}
}
```

// Output:

```
undefined - VS Code Console
gusto kag random na pasword?
typed oo:       oo
dara password nimo kol: 66Lebiay
Press any key to continue . . .
```

Random password3

This Java program generates a random password of a specified length when the user inputs "oo" in response to the question if they want a random password.

// Example:

```java
import java.util.Random;
import java.util.Scanner;

    public class randompassword3 {
    Run | Debug
    public static void main(String args[]) {
    Random random = new Random();
    Scanner scanner = new Scanner(System.in);
    char[] alpha = {'A','B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W','X',
    'Y','Z','a','b','c','d','e','f','g','h','i','j','k','1','m','n','o','p','q','r','s','t','u','v','x','y','z','0','1','2','3','4','5','6','7','8','9',};

    try{
    String sagotMo = "";
    System.out.println(x:"gusto kag random na pasword? ");
    System.out.print(s:"typed oo\t:");
    sagotMo = scanner.nextLine();
    int length = 0;
        if(sagotMo.equalsIgnoreCase(anotherString:"oo")){
            do {
            System.out.print(s:"How many characters for your password? ");
            length = scanner.nextInt();

            if(length < 5){
                System.out.println(
                "Password must contain 5 character\n" +
                "bobo spoted amp");
            }

            else {
                System.out.print(s:"dara password nimo kol: ");
                    for(int looper = 0; looper < length; looper++){
                        int randomNumber = random.nextInt(alpha.length);
                        System.out.print(alpha[randomNumber]);
                    }
            }
        }while(length < 5);
                                                    }

    }
            catch(Exception e)  {
                System.out.println(x:"error input");
            }
            System.out.println(x:"");


}
}
```

// Output:

```
undefined - VS Code Console
gusto kag random na pasword?
typed oo        :oo
How many characters for your password? 8
dara password nimo kol: camqiUlz
Press any key to continue . . .
```

RockPaperAndScissors

This Java program implements a simple game of Rock, Paper, Scissors between the user and the computer.

// Example:

```java
import java.util.*;

    public class RockPaperAndScissors {
        Run | Debug
        public static void main(String args[]) {
            Random random = new Random();
            Scanner scanner = new Scanner(System.in);

        try {
            int userChoice;
            String askUserToContinue = "";
            String ast = "=======================================";

            do{

            System.out.println(
                "Selection\n" +
                "SCISSOR == 1\n" +
                "ROCK \t== 2\n" +
                "PAPER \t== 3"
                );

            System.out.println(ast);
            System.out.print(s:"your selection:\t");
                userChoice = scanner.nextInt();
                int computer = random.nextInt(bound:3)+1;
            System.out.println(ast);

            int wordNumber2 = computer;
            int wordNumber = userChoice;
            String computerpicked = "";
            String userpicked = "";


                if( wordNumber == 1 ){
                    userpicked = "rock";
                }else if( wordNumber == 2 ){
                    userpicked = "paper";
                }else if( wordNumber == 3 ){
                    userpicked = "scissors";
                }

                if( wordNumber2 == 1 ){
                    computerpicked = "rock";
                }else if( wordNumber2 == 2 ){
                    computerpicked = "paper";
                }else if( wordNumber2 == 3 ){
                    computerpicked = "scissors";
                }
```

```
        //user draw
        if  ( userChoice == 1 && computer == 1 || userChoice == 2 && computer == 2|| userChoice == 3 && computer == 3  ){
            System.out.print(s:"DRAW!!!");
            System.out.println( "\nYou choose:\t" + userpicked + "\nCPu choose:\t" + computerpicked );
                System.out.print(s:"do you want to continue?[yes]/[no] ");
                askUserToContinue = scanner.next();
                System.out.println(x:"");
        }
        //user win
        else if(userChoice == 1 && computer == 3 || userChoice == 2 && computer == 1|| userChoice == 3 && computer == 2 ){
            System.out.print(s:"WINNER");
            System.out.println( "\nYou choose:\t" + userpicked + "\nCPu choose:\t" + computerpicked );
                System.out.print(s:"do you want to continue?[yes]/[no]  ");
                askUserToContinue = scanner.next();
                System.out.println(x:"");
        }
        //user loss
        else if(userChoice == 1 && computer == 2 || userChoice == 2 && computer == 3|| userChoice == 3 && computer == 1 ){
            System.out.print(s:"GAME LOSS!!");
            System.out.println("\nYou choose:\t" + userpicked + "\nCPu choose:\t" + computerpicked );
                System.out.print(s:"do you want to continue?[yes]/[no]  ");
                askUserToContinue = scanner.next();
                System.out.println(x:"");
        }
        else{
        System.out.println(x:"get out!");
        System.out.print(s:"do you want to continue?[yes]/[no]  ");
        askUserToContinue = scanner.next();
        System.out.println(x:"");
         }


        }while(askUserToContinue.equalsIgnoreCase(anotherString:"yes"));
        System.out.println(x:"Exiting Program");
        }



    catch(InputMismatchException e){
        System.out.println(x:"input number 1 - 3");


    }


}
}
```

// Output:

```
undefined - VS Code Console
Selection
SCISSOR == 1
ROCK    == 2
PAPER   == 3
=========================================
your selection: 1
=========================================
DRAW!!!
You choose:     rock
CPu choose:     rock
do you want to continue?[yes]/[no]
```

RockPaperScissorsPart Two

This Java program is an enhanced version of the Rock, Paper, Scissors game, where the user can choose to gamble on themselves or the computer, and the game is played in the best of 5 rounds.

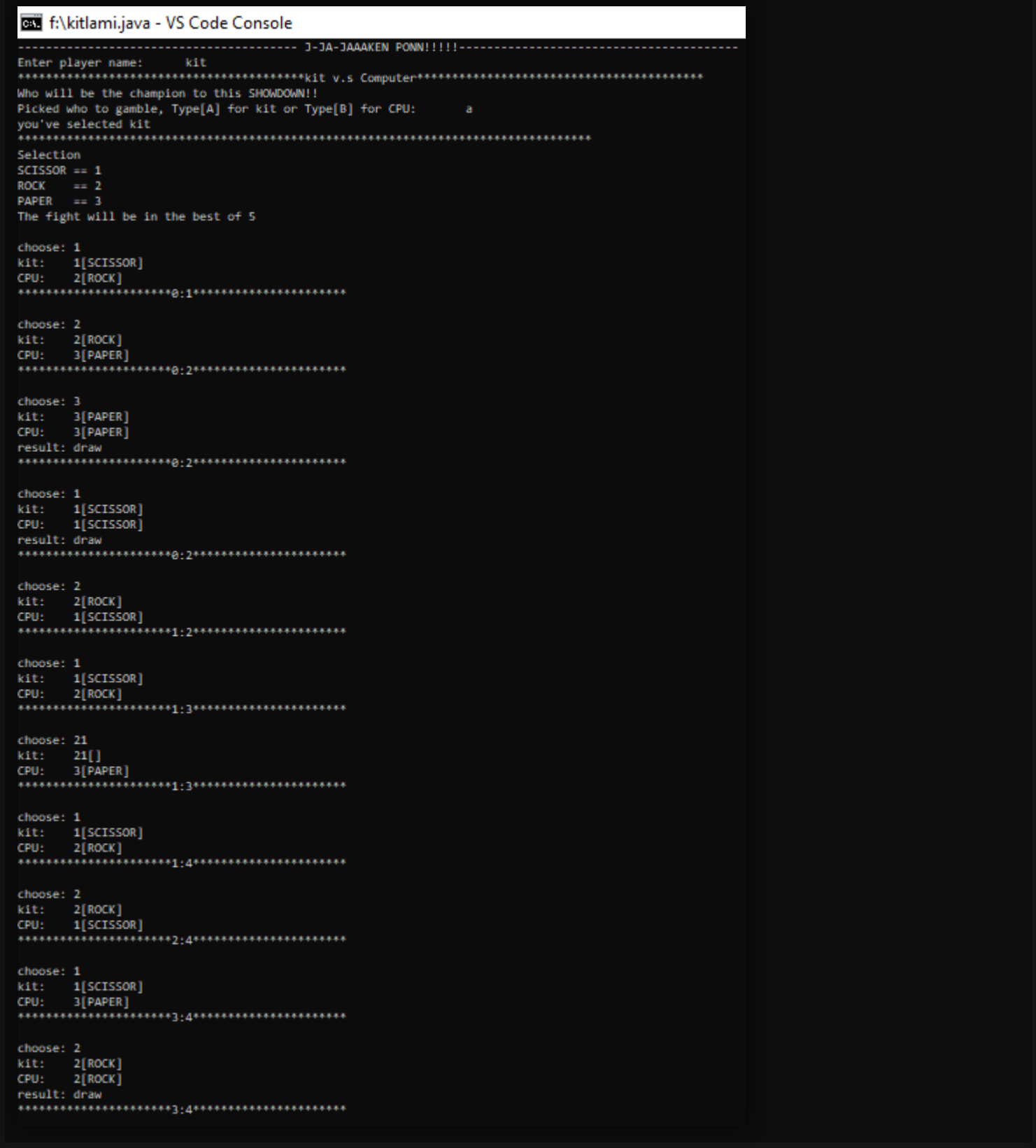
// Example:

```
import java.util.*;
    public class RockPaperScissorsPartTwo {
        Run | Debug
        public static void main(String args[]) {
            Random random = new Random();
            Scanner scanner = new Scanner(System.in);

        try {
            int userChoice = 0;
            String askUserToContinue = "";
            String ast = "========================================";
            String line = "----------------------------------------";
            String star = "****************************************";
            String smolstar = "**********************";
            String userPlayerName;
            char userGambleSelection;
            int computerScore = 0;
            int playerScore = 0;
            int bet = 0;
            int userGambleSelectionToInt = 0;

                System.out.println(line+ " J-JA-JAAAKEN PONN!!!!!"+ line);

                do{

                System.out.print(s:"Enter player name:\t");
                userPlayerName = scanner.nextLine();
                System.out.println(star + userPlayerName + " v.s Computer"+ star);
                System.out.print(
                "Who will be the champion to this SHOWDOWN!!\n" +
                "Picked who to gamble, Type[A] for "+userPlayerName+" or Type[B] for CPU:\t");
                userGambleSelection = scanner.next().charAt(index:0);
                if( userGambleSelection == 'A' || userGambleSelection == 'a' ){
                    userGambleSelectionToInt = 1;
                    System.out.println("you've selected " + userPlayerName);
                }else if(  userGambleSelection == 'B' || userGambleSelection == 'B' ){
                    userGambleSelectionToInt = 2;
                    System.out.println(x:"you've selected Computer");
                }

                System.out.println(star + star);

            System.out.println(
                "Selection\n" +
                "SCISSOR == 1\n" +
                "ROCK \t== 2\n" +
                "PAPER \t== 3"
                );
                System.out.println(x:"The fight will be in the best of 5");
            System.out.println(x:"");
                for (int attempt = 0; attempt <= 2;  attempt++) {
                    int computer = random.nextInt(bound:3)+1;
                    int wordNumber2 = computer;

                    String computerpicked = "";
                    String userpicked = "";
```

```
        System.out.print(s:"choose:\t");
        userChoice = scanner.nextInt();
        int wordNumber = userChoice;
                if( wordNumber == 1 ){
                    userpicked = "SCISSOR";
                }else if( wordNumber == 2 ){
                    userpicked = "ROCK";
                }else if( wordNumber == 3 ){
                    userpicked = "PAPER";
                }
                if( wordNumber2 == 1 ){
                    computerpicked = "SCISSOR";
                }else if( wordNumber2 == 2 ){
                    computerpicked = "ROCK";
                }else if( wordNumber2 == 3 ){
                    computerpicked = "PAPER";
                }

        System.out.println(userPlayerName + ":\t"+userChoice + "["+userpicked+"]");
        System.out.println("CPU:\t" +computer+"["+computerpicked+"]");
        // System.out.println(computer);
        //draw
        if  ( userChoice == 1 && computer == 1 || userChoice == 2 && computer == 2|| userChoice == 3 && computer == 3  ){
            System.out.println(x:"result: draw");
        }
        //user win
        else if(userChoice == 1 && computer == 3 || userChoice == 2 && computer == 1|| userChoice == 3 && computer == 2 ){

        playerScore++;
        }
        //user loss
        else if(userChoice == 1 && computer == 2 || userChoice == 2 && computer == 3|| userChoice == 3 && computer == 1 ){

        computerScore++;
        }
        attempt--;
        if (playerScore == 5 || computerScore == 5 ){
        attempt = 2;
        }
        System.out.println(smolstar + playerScore + ":" + computerScore + smolstar );
        System.out.println(x:"");
    }

    if( playerScore == 5 ){
        bet = 1;
    }else if( computerScore == 5 ){
        bet = 2;
    }
```

```
        if(playerScore == 5 ){
         System.out.println(userPlayerName +" WINS!! THE CHAMPTION TO THIS ULTIMATE SHOWDOWN JAKEN PON 2024");
        }
            else {
                System.out.println(x:"CPU WINS!! THE CHAMPTION TO THIS ULTIMATE SHOWDOWN JAKEN PON 2024");
            }

        if (bet != userGambleSelectionToInt){
            System.out.println(x:"You lose your bet");
        }
        else{
            System.out.println(x:"YAY, you won your bet");
        }

        System.out.print(s:"do you want to continue?[yes]/[no]  ");
        askUserToContinue = scanner.next();
        System.out.println(x:"");


        }while(askUserToContinue.equalsIgnoreCase(anotherString:"yes"));
        System.out.println(x:"Exiting Program");
        }

    catch(InputMismatchException e){
        System.out.println(x:"input number 1 - 3");


    }

}
}
```

// Output:


f:\kitlami.java - VS Code Console
------------------------------------ J-JA-JAAAKEN PONN!!!!!------------------------------------
Enter player name: kit
**************************************kit v.s Computer**************************************
Who will be the champion to this SHOWDOWN!!
Picked who to gamble, Type[A] for kit or Type[B] for CPU: a
you've selected kit
****
Selection
SCISSOR == 1
ROCK   == 2
PAPER   == 3
The fight will be in the best of 5
choose: 1
kit: 1[SCISSOR]
CPU: 2[ROCK]
**********0:1**********
choose: 2
kit: 2[ROCK]
CPU: 3[PAPER]
**********0:2**********
choose: 3
kit: 3[PAPER]
CPU: 3[PAPER]
result: draw
**********0:2**********
choose: 1
kit: 1[SCISSOR]
CPU: 1[SCISSOR]
result: draw
**********0:2**********
choose: 2
kit: 2[ROCK]
CPU: 1[SCISSOR]
**********1:2**********
choose: 1
kit: 1[SCISSOR]
CPU: 2[ROCK]
**********1:3**********
choose: 21
kit: 21[]
CPU: 3[PAPER]
**********1:3**********
choose: 1
kit: 1[SCISSOR]
CPU: 2[ROCK]
**********1:4**********
choose: 2
kit: 2[ROCK]
CPU: 1[SCISSOR]
**********2:4**********
choose: 1
kit: 1[SCISSOR]
CPU: 3[PAPER]
**********3:4**********
choose: 2
kit: 2[ROCK]
CPU: 2[ROCK]
result: draw
**********3:4**********

```
choose: 2
kit:    2[ROCK]
CPU:    2[ROCK]
result: draw
**********************3:4**********************

choose: 1
kit:    1[SCISSOR]
CPU:    2[ROCK]
**********************3:5**********************

CPU WINS!! THE CHAMPTION TO THIS ULTIMATE SHOWDOWN JAKEN PON 2024
You lose your bet
do you want to continue?[yes]/[no]  3
```

stringWordCount

This Java program counts the number of words in a string input by the user.

```java
import java.util.*;

    class stringWordCount {
        Run | Debug
        public static void main(String[] args) {

            //word count activity
            Scanner scanner = new Scanner(System.in);
            String userPlayerInput = "";

                    System.out.print(s:"Enter words and :\t");
                    userPlayerInput = scanner.nextLine().trim();
                    String[] array = userPlayerInput.split(regex:" ");
                    System.out.println("word count " + array.length);









        }
    }
```

// Output:

```
undefined - VS Code Console
Enter words and :       the big brown fox jump in the river bank
word count 9
Press any key to continue . . .
```

theNameThing

This Java program takes a string input by the user in the format "FIRST, MIDDLE, LAST" and prints the name with the first letter of each name capitalized.

```java
import java.util.*;
class theNameThing {
    Run | Debug
    public static void main(String[] args) {

        //word count activity
        Scanner scanner = new Scanner(System.in);
        String userPlayerInput = "";
        // identify and sht
        String userPlayerInput1 = "";
        System.out.print(s:"Enter words name in this format [FIRST,MIDDLE,LAST]:\t");
        userPlayerInput1 = scanner.nextLine().trim();

        String[] array1 = userPlayerInput1.split( regex:",");
        String middle = array1[1].substring (beginIndex:0,endIndex:1);
        System.out.println("Changing to UPPER Case\t" + array1[2].toUpperCase() + ", "+ array1[0].toUpperCase() + " "+ middle.toUpperCase() + ". ");


        }
    }
```

// Output:

```
undefined - VS Code Console
Enter words name in this format [FIRST,MIDDLE,LAST]:    kEITH lOUIE,TALEDO,PAnagsaGAN
Changing to UPPER Case  PANAGSAGAN, KEITH LOUIE T.
Press any key to continue . . .
```

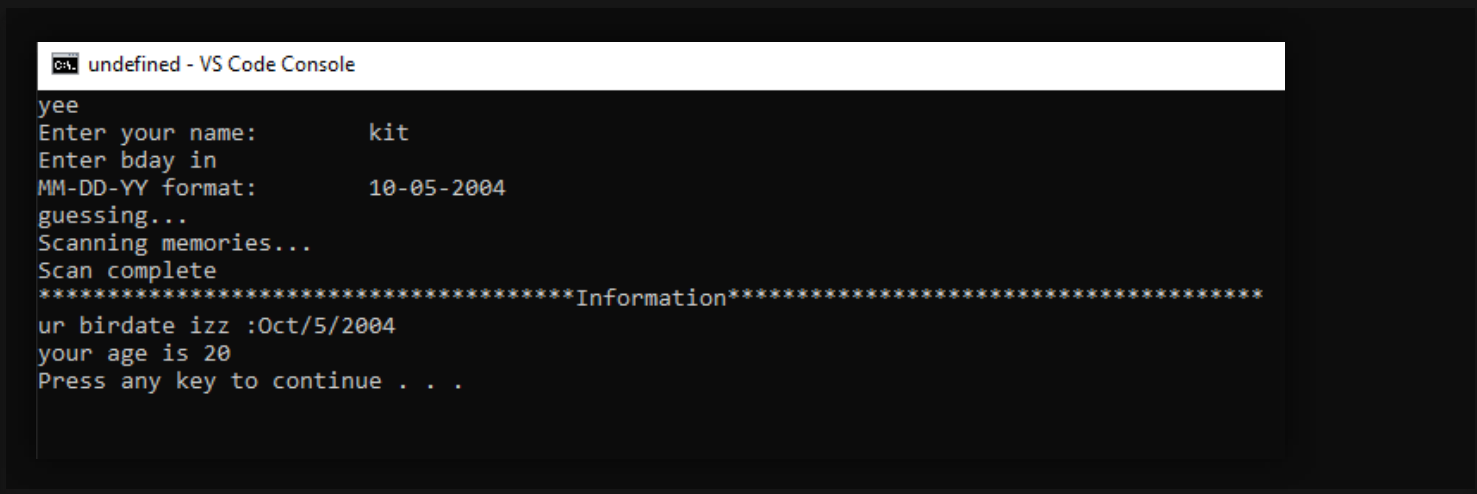
calculateAge

This Java program calculates the age of a person based on their birthdate input by the user. Heredate input's a step- by theby-step explanation of user.

//Example:

```java
import java.util.*;
import java.time.*;
    class calculateAge {
        Run | Debug
        public static void main(String[] args) {

            //word count activity
            Scanner scankit = new Scanner(System.in);
             // input
             System.out.println(x:"yee");

             System.out.print(s:"Enter your name:\t");
             String userName = scankit.nextLine().trim();
             System.out.print(s:"Enter bday in \nMM-DD-YY format:\t");
             String userPlayerInput = scankit.nextLine().trim();
             String month1[] = {"Jan", "Feb", "Mar", "April", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec",};
             String star = "************************************";


             try
             {
               System.out.println(x:"guessing...");
               Thread.sleep(millis:3000);
               System.out.println(x:"Scanning memories...");
               Thread.sleep(millis:3000);
               System.out.println(x:"Scan complete");
               System.out.println(star +"Information"+ star);
             }
             catch(InterruptedException ex)
             {
                 ex.printStackTrace();
             }

             String bday[] = userPlayerInput.split(regex:"-");
             int day = Integer.parseInt(bday[1]);
             int month = Integer.parseInt(bday[0]);

             int year = Integer.parseInt(bday[2]);
             System.out.println("ur birdate izz :" + month1[month -1 ] + "/" + day + "/"  + year);
             //age formula
             int ageFormula = 2024 - year ;
             System.out.println("your age is " + ageFormula);

            }
        }
```

// Output:


undefined - VS Code Console
yee
Enter your name: kit
Enter bday in
MM-DD-YY format: 10-05-2004
guessing...
Scanning memories...
Scan complete
**********Information**********
ur birdate izz :Oct/5/2004
your age is 20
Press any key to continue . . .

Calculate Zodiac

This is a Java program that determines a person's zodiac sign based on their birthdate.

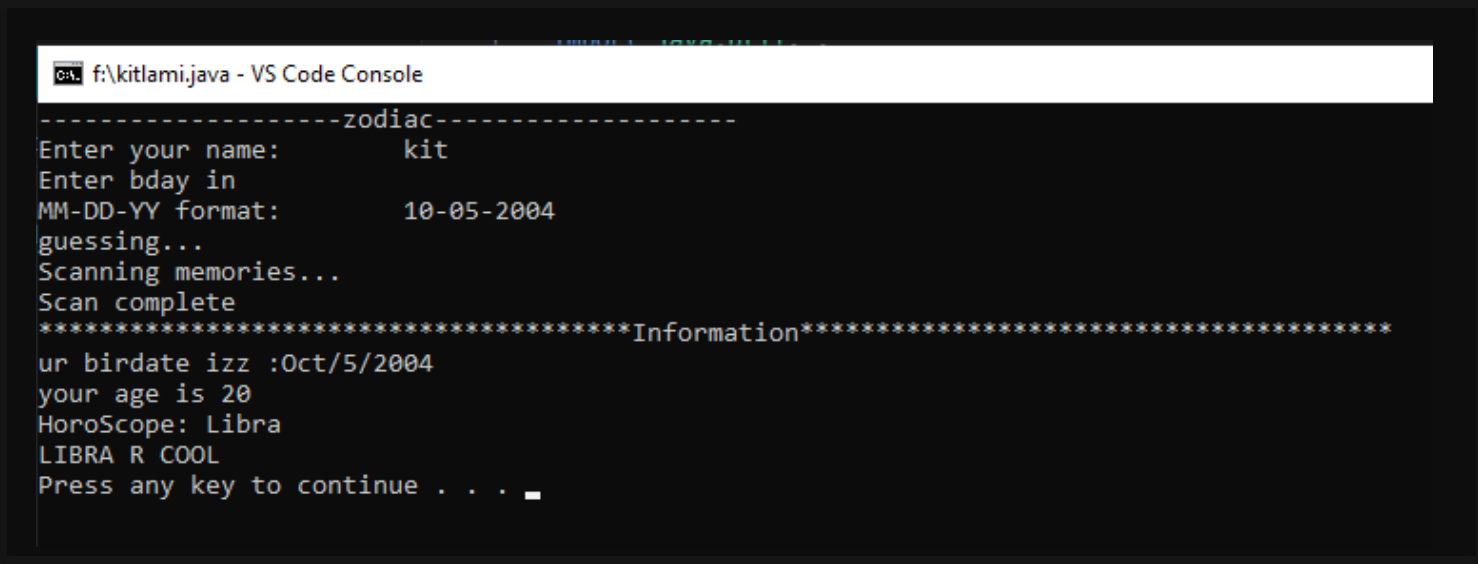
// Example:

```java
import java.util.*;
import java.time.*;
    class zodiacThingy {
        Run | Debug
        public static void main(String[] args) {

            //word count activity
            Scanner scankit = new Scanner(System.in);
             // input
             System.out.println(x:"yee");

             System.out.print(s:"Enter your name:\t");
             String userName = scankit.nextLine().trim();
             System.out.print(s:"Enter bday in \nMM-DD-YY format:\t");
             String userPlayerInput = scankit.nextLine().trim();
             String month1[] = {"Jan", "Feb", "Mar", "April", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "N
             String star = "**************************************";


             try
             {
               System.out.println(x:"guessing...");
               Thread.sleep(millis:3000);
               System.out.println(x:"Scanning memories...");
               Thread.sleep(millis:3000);
               System.out.println(x:"Scan complete");
               System.out.println(star +"Information"+ star);
             }
             catch(InterruptedException ex)
             {
                 ex.printStackTrace();
             }

             String bday[] = userPlayerInput.split(regex:"-");
             int day = Integer.parseInt(bday[1]);
             int month = Integer.parseInt(bday[0]);

             int year = Integer.parseInt(bday[2]);
             System.out.println("ur birdate izz :" + month1[month -1 ] + "/" + day + "/"  + year);
             //age formula
             int ageFormula = 2024 - year ;
             System.out.println("your age is " + ageFormula);



             //output of horoscope
             //  Aries (Ram): March 21–April 19
             if (month == 3 && day >= 21 && day <= 31 || month == 4 && day >= 1 && day <= 19){
               System.out.println(x:"HoroScope: Aries");
               System.out.println("Aries is the first sign of the zodiac (March 21 to April 20)\n" +
               ", and its mascot is the Ram. As a fire sign ruled by the planet Mars, Aries (called\n"+
               " Mesha in Vedic astrology) energy is individualistic, bold, and brave. Here, we're \n"+
                "diving into Aries' personality traits and how they apply in love, career, and more.");
             }
```

```
// Taurus (Bull): April 20–May 20
else if (month == 4 && day >= 20 && day <= 30 || month == 5 && day >= 1 && day <= 20){
  System.out.println(x:"HoroScope: Taurus");
  System.out.println("Your social circle is going through a period of transition right\n"+ "now, and bonds that were once watertight are starting to show a few cracks. Secrets\n"+
  " are slipping out, and you could sense that a big blowup is imminent. If you can,\n" + " step into the situation and tell folks that they need to keep those secrets under wraps. \n"+
  " You might feel nervous putting yourself in the middle of all of this, but your effort will\n"+ " be worth it. Nothing will backfire this time.");
}
// Gemini (Twins): May 21–June 21
else if (month == 5 && day >= 21 && day <= 31 || month == 6 && day >= 1 && day <= 21){
  System.out.println(x:"HoroScope: Gemini");
  System.out.println(x:"other: horoscope is fake ");
}
// Cancer (Crab): June 22–July 22
else if (month == 6 && day >= 22 && day <= 30 || month == 7 && day >= 1 && day <= 22){
  System.out.println(x:"HoroScope: Cancer");
  System.out.println(x:"other: horoscope is fake ");
}
// Leo (Lion): July 23–August 22
else if (month == 7 && day >= 23 && day <= 30 || month == 8 && day >= 1 && day <= 22){
  System.out.println(x:"HoroScope: Leo");
  System.out.println(x:"other: horoscope is fake ");
}
// Virgo (Virgin): August 23–September 22
else if (month == 8 && day >= 23 && day <= 31 || month == 9 && day >= 1 && day <= 22){
  System.out.println(x:"HoroScope: Virgo");
  System.out.println(x:"other: horoscope is fake ");
}
// Libra (Balance): September 23–October 23
else if (month == 8 && day >= 23 && day <= 30 || month == 10 && day >= 1 && day <= 23){
  System.out.println(x:"HoroScope: Libra");
  System.out.println(x:"LIBRA R COOL ");
}
// Scorpius (Scorpion): October 24–November 21
else if (month == 8 && day >= 24 && day <= 31 || month == 9 && day >= 1 && day <= 21){
  System.out.println(x:"HoroScope: Scorpius");
  System.out.println(x:"other: horoscope is fake ");
}
// Sagittarius (Archer): November 22–December 21
else if (month == 9 && day >= 22 && day <= 30 || month == 10 && day >= 1 && day <= 21){
  System.out.println(x:"HoroScope: Sagittarius");
  System.out.println(x:"other: horoscope is fake ");
}
// Capricornus (Goat): December 22–January 19
else if (month == 10 && day >= 22 && day <= 31 || month == 1 && day >= 1 && day <= 19){
  System.out.println(x:"HoroScope: Capricornus");
  System.out.println(x:"other: horoscope is fake ");
}

// Aquarius (Water Bearer): January 20–February 18
else if ( month == 1 && day >= 20 && day <= 31 || month == 2 && day >= 1 && day <= 18){
  System.out.println(x:"HoroScope: Aquarius");
  System.out.println(x:"other: horoscope is fake ");
}
```

```
// Pisces (Fish): February 19–March 20
else if ( month == 2 && day >= 19 && day <= 28 || month == 3 && day >= 1 && day <= 20){
  System.out.println(x:"HoroScope: Pisces");
  System.out.println(x:"other: horoscope is fake ");}
else if (month < 12 && day < 31){
  System.out.println(x:"error");
 }
}
}
```

// Output:


f:\kitlami.java - VS Code Console
--------------------zodiac--------------------
Enter your name: kit
Enter bday in
MM-DD-YY format: 10-05-2004
guessing...
Scanning memories...
Scan complete
Information
ur birdate izz :Oct/5/2004
your age is 20
HoroScope: Libra
LIBRA R COOL
Press any key to continue . . .