

```
1. import java.util.Scanner;

public class Sum{

    public static void main(String[] args){

        Scanner scanner=new Scanner(System.in);

        System.out.println("Enter num 1: ");

        double num1=scanner.nextDouble();

        System.out.println("Enter num 2: ");

        double num2=scanner.nextDouble();


        double total=num1+num2;

        System.out.println("Total is: "+total);

    }

}
```

```
2. import java.util.Scanner;

public class AgeCheck {

    public static void main(String[] args){

        Scanner scanner=new Scanner(System.in);

        System.out.println("Enter age: ");

        int age=scanner.nextInt();


        if (age>=18){

            System.out.println("Over 18");

        }

        else if(age>0 && age<18){
```

```

        System.out.println("Below 18");
    }
    else{
        System.out.println("Entered age is incorrect");

    }
}

}

```

3. import java.util.Scanner;

```

public class PassMark {

    public static void main(String[] args){

        Scanner scanner =new Scanner(System.in);

        System.out.println("Enter ICT 1 marks:");
        double ictMark=scanner.nextDouble();

        System.out.println("Enter CW marks: ");
        double cwMark=scanner.nextDouble();

        double finalmark=(ictMark+cwMark)/2;

        if (ictMark >= 30 && cwMark >= 30) {

            double finalMark = (ictMark + cwMark) / 2;

            if (finalMark >= 40) {

```

```

        System.out.println("You passed the module!");

        System.out.println("Final mark: " + finalMark);
    } else {

        System.out.println("You did not pass the module.");

        System.out.println("Final mark: " + finalMark);
    }
} else {

    System.out.println("You failed because one or both marks are below 30.");
}

scanner.close();
}
}

```

4. import java.util.Scanner;

```

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

```

```

        System.out.print("Enter your grade: ");

        int grade = scanner.nextInt();

```

```

        if (grade > 100 || grade < 40) {

```

```
        System.out.println("Invalid value");
    } else if (grade >= 70) {
        System.out.println("1st Class Honours (1)");
    } else if (grade >= 60) {
        System.out.println("2nd Class Honours Upper Division (2:i)");
    } else if (grade >= 50) {
        System.out.println("2nd Class Honours Lower Division (2:ii)");
    } else {
        System.out.println("3rd Class Honours (3)");
    }

    scanner.close();
}
}
```

5. import java.util.Scanner;

```
public class Calculator {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
```

```
        System.out.print("Enter first number: ");
```

```
        double num1 = scanner.nextDouble();
```

```
        System.out.print("Enter second number: ");
```

```
double num2 = scanner.nextDouble();
```

```
System.out.print("Enter operator (+, -, *, /): ");
```

```
char operator = scanner.next().charAt(0);
```

```
double result;
```

```
switch (operator) {
```

```
    case '+':
```

```
        result = num1 + num2;
```

```
        System.out.println("Result: " + result);
```

```
        break;
```

```
    case '-':
```

```
        result = num1 - num2;
```

```
        System.out.println("Result: " + result);
```

```
        break;
```

```
    case '*':
```

```
        result = num1 * num2;
```

```
        System.out.println("Result: " + result);
```

```
        break;
```

```
    case '/':
```

```
        // Check for division by zero
```

```
        if (num2 != 0) {
```

```

        result = num1 / num2;

        System.out.println("Result: " + result);

    } else {

        System.out.println("Error: Division by zero is not allowed.");

    }

    break;

default:

    System.out.println("Invalid operator! Please use +, -, *, or /.");

}

scanner.close();

}

}

```

6. import java.util.Scanner;

```
public class ExamEligible {
```

```
    public static void main(String[] args){
```

```
        Scanner scanner=new Scanner(System.in);
```

```
        System.out.println("Enter number of classes held: ");
```

```
        int ClassHeld=scanner.nextInt();
```

```
        System.out.println("Enter number of classes attended: ");
```

```
        int ClassAttend=scanner.nextInt();
```

```
        System.out.println("Did you had a Medical Emergency(Y/N): ");
```

```
        char Medical=scanner.next().charAt(0);
```

```

double Percentage=((double)ClassAttend/ClassHeld)*100;

if(Percentage<75){
    if(Medical == 'Y' || Medical == 'y'){
        System.out.println("Able to sit to Exam ");
    }
    else{
        System.out.println("Not able to sit to Exam" + "Your Attendance is: "+Percentage);
    }
}
else{
    System.out.println("Able to sit to Exam");
}
scanner.close();

}

}

```

```

7. import java.util.Scanner;

public class Bank {

    public static void main(String[] args){

        Scanner scanner =new Scanner(System.in);

        System.out.println("Enter Account Balance: ");
    }
}

```

```
double balance=scanner.nextDouble();
```

```
while (true){
```

```
System.out.println("Enter number of your choice of transaction ");
```

```
System.out.println("1.Deposit");
```

```
System.out.println("2.Withdraw");
```

```
System.out.println("3.Check for Fraud");
```

```
System.out.println("4.Exit");
```

```
System.out.println("Enter Choice: ");
```

```
int choice=scanner.nextInt();
```

```
switch(choice){
```

```
    case 1:
```

```
        System.out.println("Enter amount to deposit: ");
```

```
        double deposit=scanner.nextInt();
```

```
        if(deposit>0){
```

```
            balance+=deposit;
```

```
            System.out.println("balance: "+balance);
```

```
        }else{
```

```
            System.out.println("Deposit amount should be positive");
```

```
        }
```

```
        break;
```

```
    case 2:
```



```
System.out.println("Enter amount to withdraw: ");

double withdraw=scanner.nextInt();

if(balance<=withdraw){

    System.out.println("No Sufficiet Funds:");

}else{

    balance-=withdraw;

    System.out.println("balance: "+balance);

}

break;

case 3:

if (balance < 100) {

    System.out.println("Warning: Your balance is below $100! Potential fraud risk.");

} else {

    System.out.println("Your account balance is safe: $" + balance);

}

break;

case 4:

System.out.println("Thank you for transacting with us");

default:

    System.out.println("Error: Invalid transaction type. Please select a valid option.");

}
```

```
}
```

```
}
```

```
}
```

```
8. import java.util.Scanner;
```

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

```
public class Game {
```

```
    public static void main(String[] args){
```

```
        Scanner scanner=new Scanner(System.in);
```

```
        System.out.println("0. ROCK");
```

```
        System.out.println("1. PAPER");
```

```
        System.out.println("2. SCISSORS");
```

```
        System.out.println("Enter choice as 0/1/2:");
```

```
        int userChoice=scanner.nextInt();
```

```
        int computerChoice=new Random().nextInt(3);
```

```
        String userChoiceStr="";
```

```
        String computerChoiceStr ="";
```

```
        if (userChoice == 0) {
```

```
            userChoiceStr = "Rock";
```

```
} else if (userChoice == 1) {  
    userChoiceStr = "Paper";  
} else if (userChoice == 2) {  
    userChoiceStr = "Scissors";  
} else {  
    System.out.println("Invalid input. Please enter 0, 1, or 2.");  
    return;  
}
```

```
if (computerChoice == 0) {  
    computerChoiceStr = "Rock";  
} else if (computerChoice == 1) {  
    computerChoiceStr = "Paper";  
} else if (computerChoice == 2) {  
    computerChoiceStr = "Scissors";  
}
```

```
System.out.println("User chose: " + userChoiceStr);  
System.out.println("Computer chose: " + computerChoiceStr);
```

```
if (userChoice == computerChoice) {  
    System.out.println("It's a tie!");  
}
```

```
} else if (userChoice == 0 && computerChoice == 2) {  
    System.out.println("User wins! Rock crushes Scissors.");  
} else if (userChoice == 2 && computerChoice == 1) {  
    System.out.println("User wins! Scissors cuts Paper.");  
} else if (userChoice == 1 && computerChoice == 0) {  
    System.out.println("User wins! Paper covers Rock.");  
} else if (computerChoice == 0 && userChoice == 2) {  
    System.out.println("Computer wins! Rock crushes Scissors.");  
} else if (computerChoice == 2 && userChoice == 1) {  
    System.out.println("Computer wins! Scissors cuts Paper.");  
} else if (computerChoice == 1 && userChoice == 0) {  
    System.out.println("Computer wins! Paper covers Rock.");  
}  
  
}  
  
}
```