**Core Java Exercises Solutions**

1. **Hello World Program**

class HelloWorld

{

public static void main(String args[])

{

System.out.println("Hello,World!");

}

}

1. **SimpleCalculator**

import java.util.Scanner;

class SimpleCalculator

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter first number : ");

double a=sc.nextDouble();

System.out.println("Enter second number : ");

double b=sc.nextDouble();

System.out.println("Enter an operator (+,-,\*,/) : ");

char op=sc.next().charAt(0);

double res;

switch(op)

{

case '+':res=a+b;

System.out.println("Addition : "+res);

break;

case '-':res=a-b;

System.out.println("Subtraction : "+res);

break;

case '\*':res=a\*b;

System.out.println("Multiplication : "+res);

break;

case '/':if(b!=0)

{

res=a/b;

System.out.println("Division : "+res);

}else{

System.out.println("Zero Division Error");

}

break;

default:System.out.println("Enter a valid operator!");

}

sc.close();

}

}

**3.Even or Odd Number**

import java.util.Scanner;

class EvenOdd

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter a number : ");

int n=sc.nextInt();

if (n%2==0){

System.out.println(n+" is an even number");

}else{

System.out.println(n+" is an odd number");

}

}

}

**5.Multiplication Table**

import java.util.Scanner;

class Table{

public static void main(String args[]){

Scanner sc=new Scanner(System.in);

System.out.print("Enter a number to display its table : ");

int n=sc.nextInt();

for(int i=1;i<=10;i++){

System.out.println(n+" x "+i+" = "+(n\*i));

}

}

}

**6. Data Type Demonstration**

class Dtypes{

public static void main(String args[]){

int a=120;

float b=67.8f;

double c=234.8976;

char d='A';

boolean f=true;

System.out.println("Integer value : "+a);

System.out.println("Float value : "+b);

System.out.println("Double value : "+c);

System.out.println("Character value : "+d);

System.out.println("Boolean Value : "+f);

}

}

**7. Type Casting Example**

class Type{

public static void main(String args[]){

//Widening Type Casting (Automatic)

int myint=234;

double int\_to\_double=myint;//Implicit Type Casting

System.out.println("Int Value : "+myint);

System.out.println("Int to Double value : "+int\_to\_double);

//Narrowing Casting (manual)

double mydouble=23.7865;

int double\_to\_int=(int)mydouble;//Explicit Type Casting

System.out.println("Double value : "+mydouble);

System.out.println("Double to int value : "+double\_to\_int);

}

}

**8. Operator Precedence**