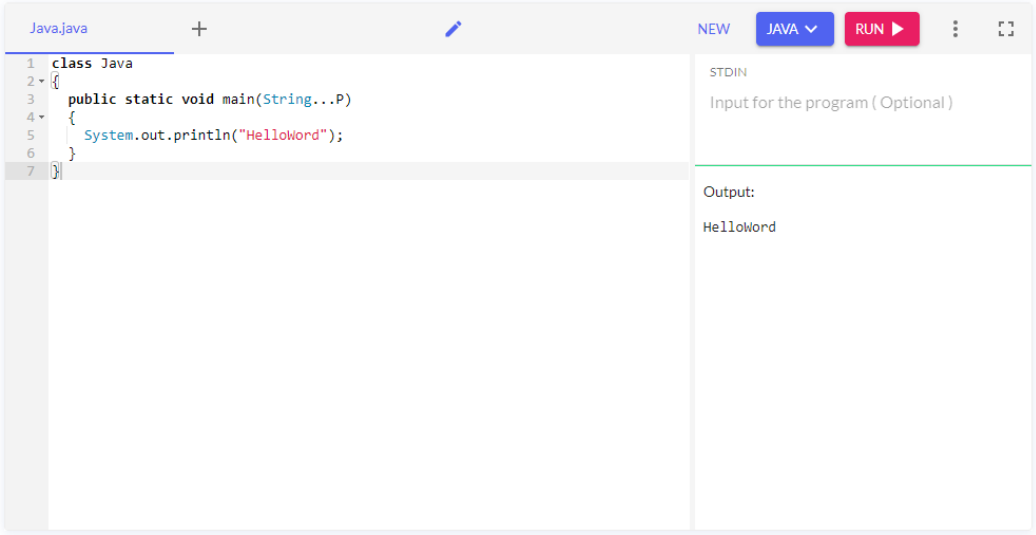
1)Implement a Java program “Hello World” with javap command.

```
class Java

{
public static void main (String... x)
{
System.out.println("Hello World");
}
}
```



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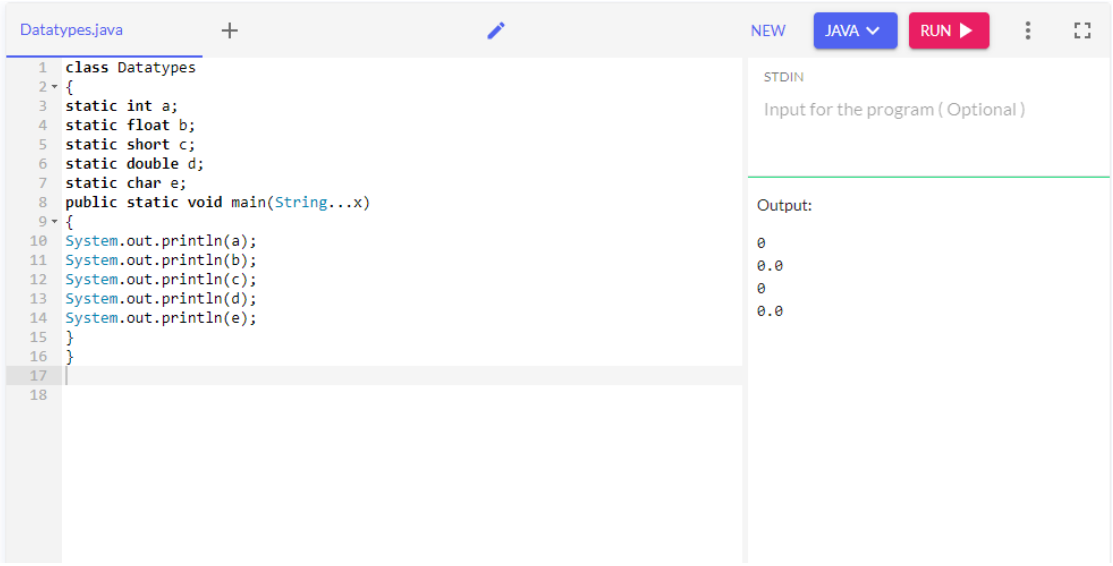
2)Implement a Java program to find the default values of data types.

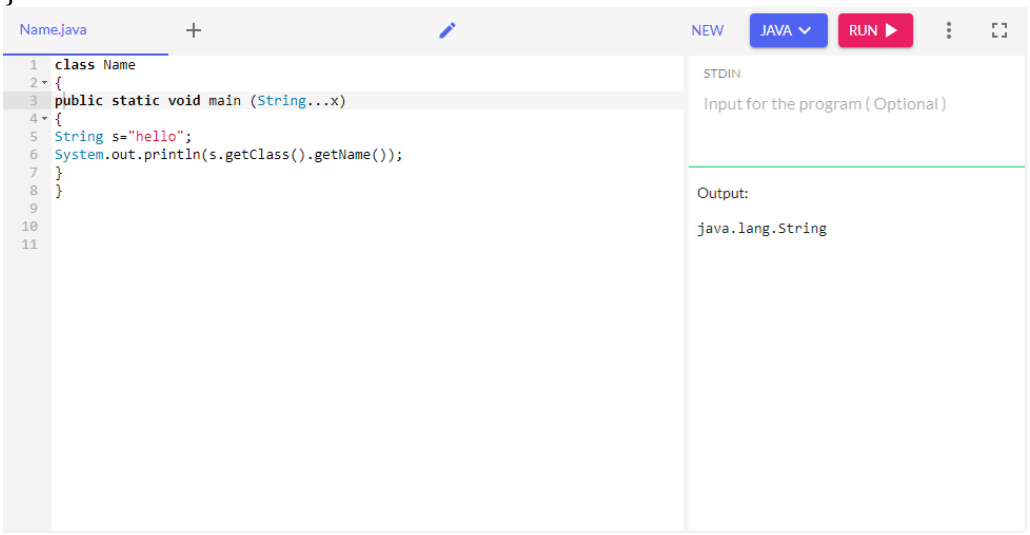
```
class Datatypes
{
static int a;
static float b;
static short c;
static double d;
static char e;
public static void main(String...x)
{
System.out.println(a);
System.out.println(b);
System.out.println(c);
System.out.println(d);
System.out.println(e);
}
}
```




```
class Datatypes
{
static int a;
static float b;
static short c;
static double d;
static char e;
public static void main(String...x)
{
System.out.println(a);
System.out.println(b);
System.out.println(c);
System.out.println(d);
System.out.println(e);
}
}
```

3)Implement a Java program to find the data type class name as an output.

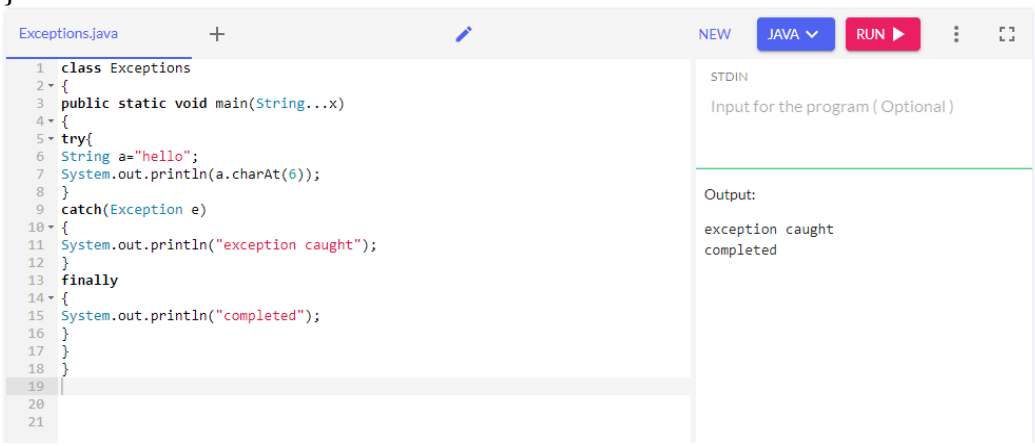
```
class Name
{
Public static void main (String...x)
{
String s="hello";
System.out.println(s.getClass().getName());
}
}
```



4)Implement a Java program on predefined exceptions.

```
class Exceptions
{
public static void main(String...x)
{
try{
String a="hello";
System.out.println(a.charAt(6));
}
catch(Exception e)
{
System.out.println("exception caught");
```

```
}
finally
{
System.out.println("completed");
}
}
}
```




```
class Exceptions
{
public static void main(String...x)
{
try{
String a="hello";
System.out.println(a.charAt(6));
}
catch(Exception e)
{
System.out.println("exception caught");
}
finally
{
System.out.println("completed");
}
}
}
```

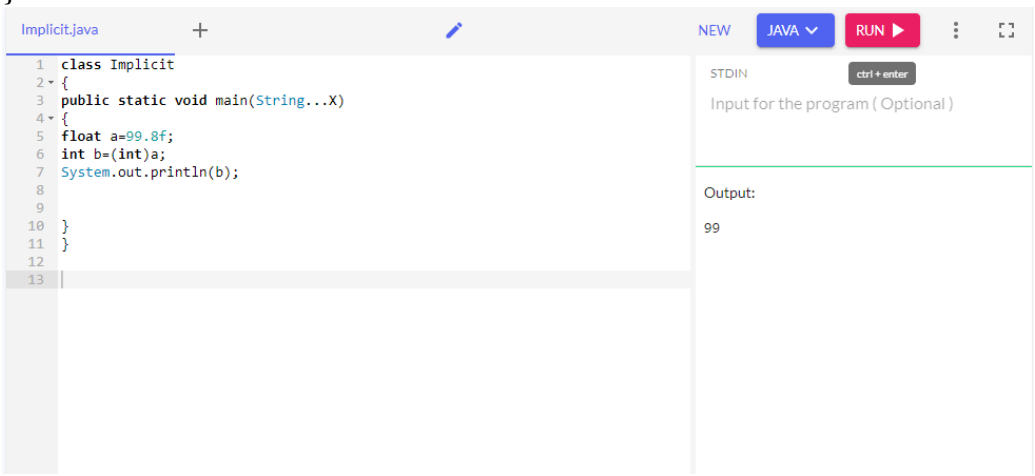
5)Implement a Java program on single inheritance.

```
class Single
{
 void add(int x,int y)
 {
  System.out.println(x+y);
 }
}
class Inheritance extends Single
{
 void sub(int x,int y)
 {
  System.out.println(x-y);
 }
}
class main
{
  public static void main(String...x)
{

 Inheritance ob=new Inheritance();
  ob.add(10,20);
  ob.sub(10,20);
}
}
```

6)Implement a Java program on implicit type conversion.

```
class Implicit
{
public static void main(String...X)
{
float a=99.8f;
int b=(int)a;
System.out.println(b);
```

}
}

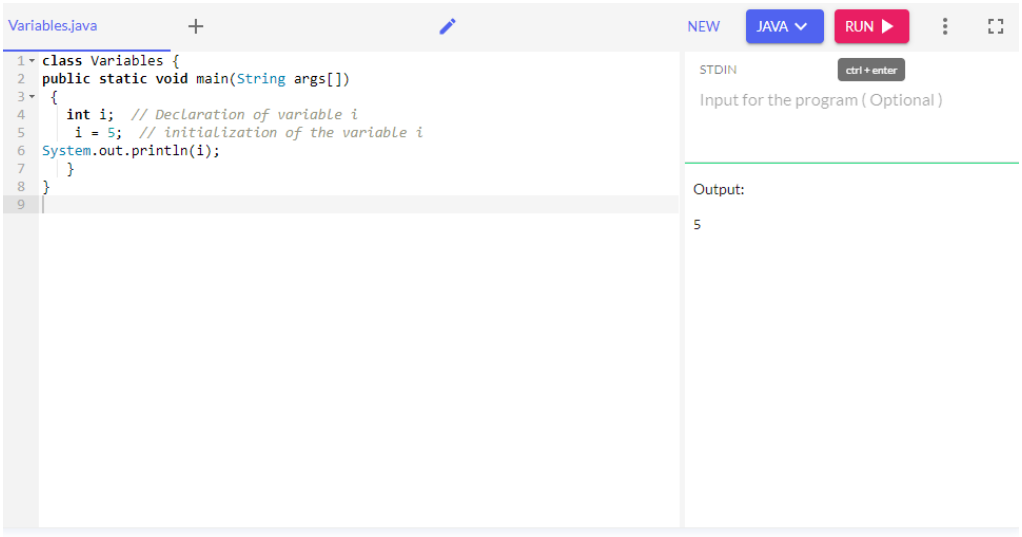


7)Implement a Java program on explicit type conversion.

```
class Explicit
{
public static void main(String...x)
{
int a=10;
float b=a;
System.out.println(b);
float d=5.66f;
int c=(int)d;
System.out.println(c);
}
}
```

8)Implement a Java program to show difference between variable declaration and variable initialization.

```
class Variables {
public static void main(String args[])
 {
   int i;  // Declaration of variable i
    i = 5;  // initialization of the variable i
   System.out.println(i);
   }
}
```




```
class Variables {
public static void main(String args[])
 {
   int i;  // Declaration of variable i
    i = 5;  // initialization of the variable i
System.out.println(i);
   }
}
```

9) Write a java program to implement both actual parameters and formal parameters.

```
class Para {
void sum(int x,int y);

{

System.out.println(x+y);

}

}

public static void main(String...x){

int a=10,b=20;

Para.o=new Para();

o.sum(a,b);

}
```

10) Write a java program for variable cases, start with $ symbol.

```
class Case

{

        public static void main(String...P)

        {

                Scanner sc=new Scanner(System.in);

                System.out.println("enter the values : ");

                int $PascalCase=sc.nextInt();

      float $camelCase=sc.nextFloat();

      String $snake_case=sc.next();
```

```
        System.out.println($PascalCase);

        System.out.println($camelCase);

        System.out.println($snake_case);

            }

}
```

11) Write a java program on jagged arrays.

```
import java.util.*;
class Prog
{
        public static void main(String...P)
        {
                int a[][]=new int[3][];
                a[0]=new int[2];
                a[1]=new int[1];
                a[2]=new int[3];
                Scanner sc=new Scanner(System.in);
                for(int i=0;i<a.length;i++)
                {
                        for(int j=0;j<a[i].length;j++)
                        {

                        a[i][j]=sc.nextInt();
                }

                }
                for(int i=0;i<a.length;i++)
                        {
                                for(int j=0;j<a[i].length;j++)
                                {
                                System.out.println(a[i][j]);
                        }
                        }
        }
}
```

12) Write a java program consider a group of elements ,divide those elements as individua elements, exclude the highest value among the list and add remaining elements and find the result and return the result using 1D array.

```
import java.util.*;
class Array
{
        public static void main(String...P)
        {
                int max=0,sum=0;
                int a[]=new int[4];
                Scanner sc=new Scanner(System.in);
```

```
		System.out.println("enter the values");
		for(int i=0;i<a.length;i++)
		{
			a[i]=sc.nextInt();
		}
		for(int x:a)
		{
			if(max<x)
			{
				max=x;
			}
		}
		for(int i=0;i<a.length;i++)
		{
		if(a[i]==max)
		{
			continue;
		}
		sum+=a[i];

	}
	System.out.println("Sum of the array elements : "+sum);
	}
}
```

13) Write a java program on bank for account creation and debit of money and provide acct details of user.

```
import java.util.*;
class B
{
int balance=0;
void credit(int cr)
{
balance=cr+balance;
System.out.println("balance"+balance);
}
void debit(int db)
{
balance=balance-db;
System.out.println("balance"+balance);

}
void balance()
{
System.out.println("balance"+balance);

}
}

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

```
B b=new B();
Scanner sc=new Scanner(System.in);
D d=new D();
E e=new E();

String s=sc.nextLine();

switch(s)
 {
  case "yes":
   System.out.println("enter acc details");
   int x=sc.nextInt();
   d.acc(x);
System.out.println("are you want to create");
System.out.println("credit=1");
System.out.println("debit=2");
System.out.println("balance=3");
int n=sc.nextInt();

switch(n){
      case 1:
      int cr=sc.nextInt();
         b.credit(cr);
         break;
     case 2:
       int db=sc.nextInt();
         b.debit(db);
        break;
     case 3:
        b.balance();
        break;
     default:
       break;
  }

    break;
  case "no":
   System.out.println("create account");
   int ano=sc.nextInt();
   int ifsc=sc.nextInt();
String name=sc.nextLine();
 e.details(ano,ifsc,name);
    break;
  default :
    break;
        }

System.out.println("are you want to create");
System.out.println("credit=1");
System.out.println("debit=2");
System.out.println("balance=3");
int n=sc.nextInt();
```

```
switch(n){
      case 1:
      int cr=sc.nextInt();
         b.credit(cr);
         break;
     case 2:
       int db=sc.nextInt();
         b.debit(db);
        break;
     case 3:
        b.balance();
        break;
     default:
       break;
  }
}
}
class D extends A
{
public  int acc(int x)
{
int arr[]=new int[ ]{345,346,347};
for(int i=0;i<arr.length;i++)
{
if(x==arr[i])
{
System.out.println("name");
System.out.println("account:"+x);
System.out.println("ifsc");
}
}
return 0;
}
}

class E
{
void details(int ano,int ifsc,String name)
{
System.out.println("acc no is"+ano);
System.out.println("ifsc code is"+ifsc);
System.out.println("name is"+name);

}
}
```

14)write a Java program on Phone password pin check.

```
import java.util.*;
public class Password
{
```

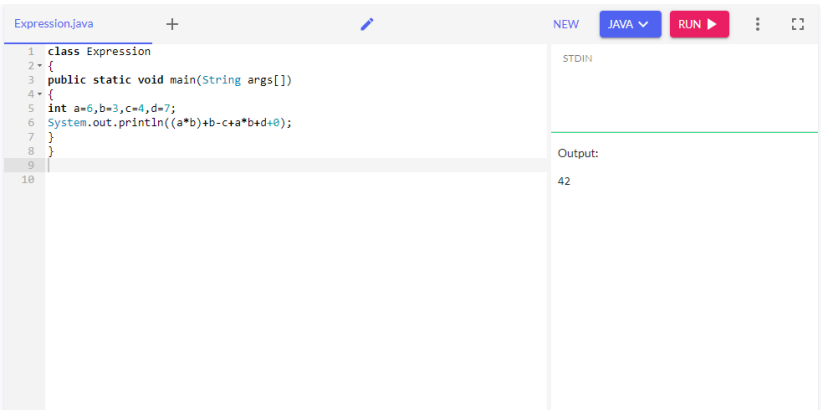
```
public static void main(String args[])
{

Scanner sc=new Scanner(System.in);
System.out.println("Enter pin");
int n=sc.nextInt();
int count=0;
while(count<4)
{
if(n==1234)
{
System.out.println("welcome");
break;
}
else
{
System.out.println("password incorrect try again");

count++;
System.out.println("Enter pin");
n=sc.nextInt();

}
}
if(count>=4)
{
System.out.println("wait for 30s");
for(int i=30;i>=1;i--)
{
System.out.println(i);
}
}
}
}
```

15) Write a java program on single inheritance .

```
class Inheritance
     {
      void add(int x,int y)
     {
     System.out.println(x+y);
     }
     }
     class A extends Prog13
     {
     void sub(int x,int y)
     {
     System.out.println(x-y);
     }
     }
     class main
     {
     public static void main(String...x)
     {
     A ob=new A();
     ob.add(10,20);
     ob.sub(10,20);
     }
     }
```

16) Write a java program on evaluation of expression.

```
class Expression
        {
        public static void main(String args[])
        {
        int a=6,b=3,c=4,d=7;
        System.out.println((a*b)+b-c+a*b+d+0);
        }
        }
```



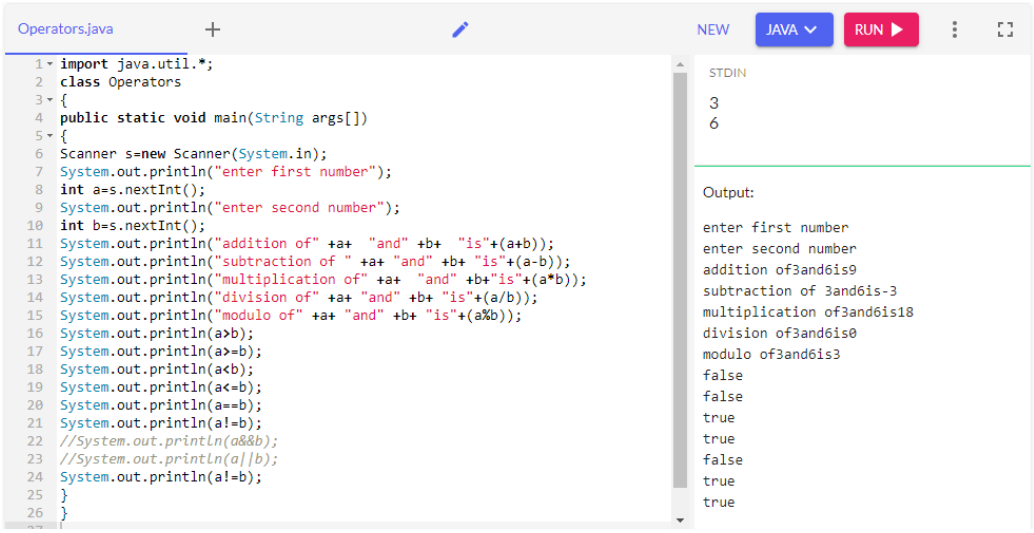
17) Write a java program to find Area of square, rectangle by using scanner class in encapsulation.

```
class Area
{
void square(int x)
{
System.out.println("Area of square"+(x*x));
}
void rectangle(int x,int y)
{
System.out.println("Area of rectangle"+(x*y));
}
}
class A {
public static void main(String...x)
{
int x=5,y=3;
Area a=new Area();
a.square(x);
a.rectangle(x,y);
}
}
```

18)Write a java program on operators.

```
import java.util.*;
class Operators
{
public static void main(String args[])
{
Scanner s=new Scanner(System.in);
System.out.println("enter first number");
int a=s.nextInt();
System.out.println("enter second number");
int b=s.nextInt();
System.out.println("addition of" +a+  "and" +b+  "is"+(a+b));
System.out.println("subtraction of " +a+ "and" +b+ "is"+(a-b));
System.out.println("multiplication of" +a+  "and" +b+"is"+(a*b));
System.out.println("division of" +a+ "and" +b+ "is"+(a/b));
System.out.println("modulo of" +a+ "and" +b+ "is"+(a%b));
System.out.println(a>b);
System.out.println(a>=b);
System.out.println(a<b);
System.out.println(a<=b);
System.out.println(a==b);
System.out.println(a!=b);
//System.out.println(a&&b);
//System.out.println(a||b);
```

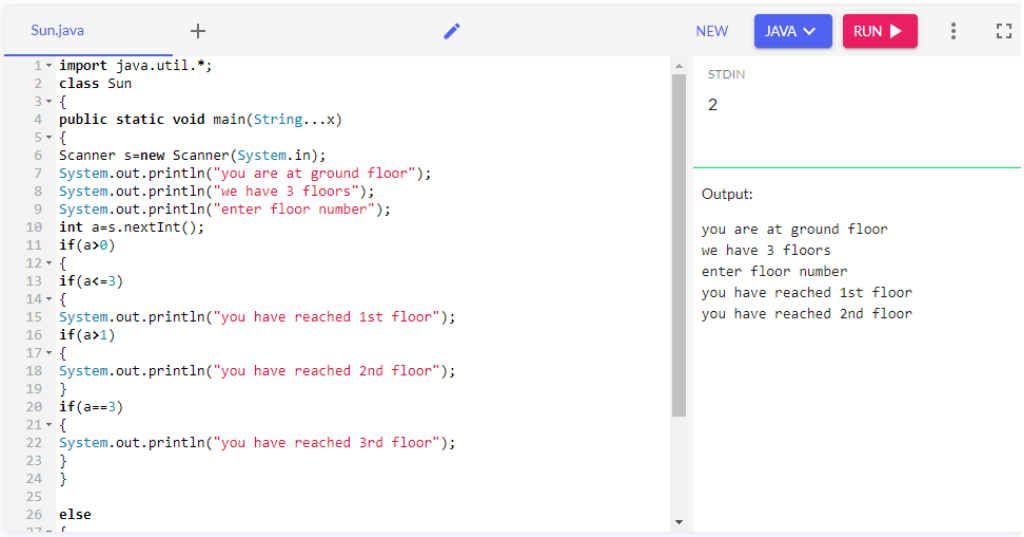
System.out.println(a!=b);
}
}




```
import java.util.*;
class Operators
{
public static void main(String args[])
{
Scanner s=new Scanner(System.in);
System.out.println("enter first number");
int a=s.nextInt();
System.out.println("enter second number");
int b=s.nextInt();
System.out.println("addition of" +a+  "and" +b+  "is"+(a+b));
System.out.println("subtraction of " +a+ "and" +b+ "is"+(a-b));
System.out.println("multiplication of" +a+  "and" +b+"is"+(a*b));
System.out.println("division of" +a+ "and" +b+ "is"+(a/b));
System.out.println("modulo of" +a+ "and" +b+ "is"+(a%b));
System.out.println(a>b);
System.out.println(a>=b);
System.out.println(a<b);
System.out.println(a<=b);
System.out.println(a==b);
System.out.println(a!=b);
//System.out.println(a&&b);
//System.out.println(a||b);
System.out.println(a!=b);
}
}
```

19)write a java program on Lift application.

```
import java.util.*;
class Sun
{
public static void main(String...x)
{
Scanner s=new Scanner(System.in);
System.out.println("you are at ground floor");
System.out.println("we have 3 floors");
System.out.println("enter floor number");
int a=s.nextInt();
if(a>0)
{
if(a<=3)
{
System.out.println("you have reached 1st floor");
if(a>1)
{
System.out.println("you have reached 2nd floor");
}
if(a==3)
{
System.out.println("you have reached 3rd floor");
}
}


else
{
System.out.println("we don't have " +a + "th floor");
}
}
}
}
```



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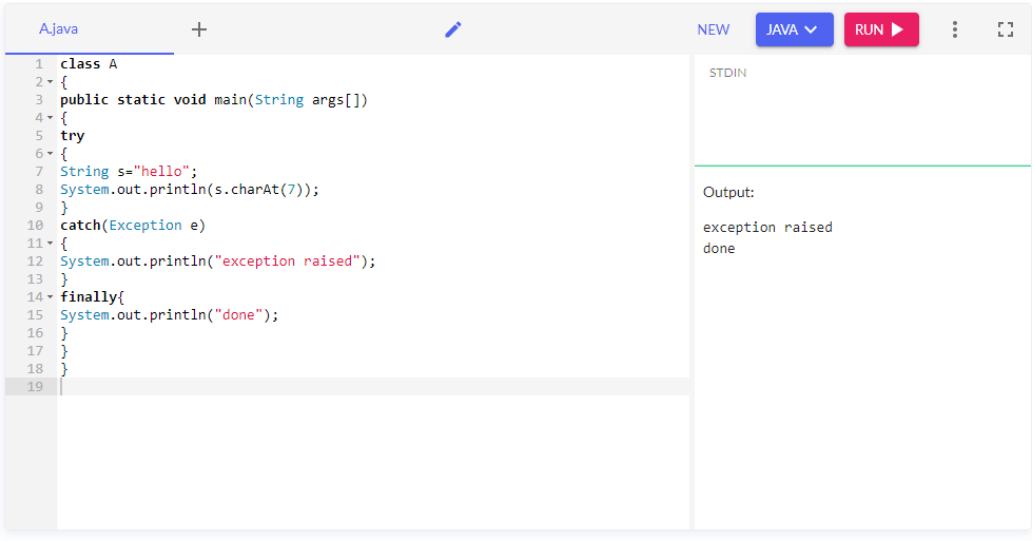
20)write a Java program on per-defined Exceptions.

```
class A
{
public static void main(String args[])
{
try
{
String s="hello";
System.out.println(s.charAt(7));
}
catch(Exception e)
{
System.out.println("exception raised");
}
finally{
System.out.println("done");
}
}
}
```



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