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**ASSIGNMENT**

**OF**

**ADVANCE**

**JAVA PROGRAMMING**

**SUBMITTED TO :-**

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**Q.1)** Write a program to find the largest 2 numbers and the smallest 2

numbers in the given array

**Sol:**

import java.util.\*;

class first

{

public static void main(String ar[])

{

int x[],temp;

Scanner sn=new Scanner(System.in);

System.out.println("enter any size");

int n=sn.nextInt();

x=new int [n];

for(int i=0;i<n,i++)

{

x[i]=sn.nextInt();

}

for(int j=0;j<n,j++)

{

if(x[i]>x[j])

{

temp=x[i];

x[i]=x[j];

x[j]=temp;

}

}

system.out.println("1st smallest="+x[0]);

system.out.println("2nd smallest="+x[1]);

system.out.println("1st largest="+x[n-1]);

system.out.println("2nd largest="+x[n-2]);

}

}

**Q.2)** Given a string, if the first or last chars are 'x', return the string

without those 'x' chars, and otherwise return the string unchanged.

If the input is "xHix", then output is "Hi".

**Sol:**

import java.util.\*;

class secpro

{

public static void main(String args[])

{

string str=new String();

Scanner sn=new Scanner(System.in);

System.out.println("enter any string");

str=sn.nextLine();

char a=str.charAt(0);

char b=str.charAt(str.length()-1);

if(a=='x' && b=='x')

System.out.println(str.replaceAll("[x]"," "));

else

System.out.println(str);

}

}

**Q.3)** You are appoint as Computer Programmer in Cameron Hotel,

Chandigarh. A task is given to you for generate a WiFi password for

new customer who book a room in a hotel. A customer registration

will contains Customer First Name and Room No. Instructions for

generating a WiFi password as:

* + 1. Your password is of 6 digits long only.
    2. Unit digit will be alphabet character (lower case) that will calculated by the length of customer first name.
    3. Tenth digit will be sum of customer room no.
    4. Hundreds digit will be special character (! ,@,#,$,%,^,&,\*,(,) ) calculate by the length of Room No.
    5. Thousands unit will be numeric calculated on basis of sum of room number as follows.
       1. If sum is odd, then same number will be allocated
       2. If sum is even, then add one digit to the result.

Example: Customer Name: James Gosling, Room No: 312

WiFi Password:7^6e

**Sol:**

import java.util.\*;

class third

{

public static void main(String ar[])

{

int n=0,s=0;

int r=0,p4=0,p2=0;

char p3=0,p1=0;

Scanner sn=new Scanner(System.in);

System.out.println("enter name and room number");

String name=new String();

name=sn.nextLine();

int rn=sn.nextInt();

int l=name.length();

for(int i=0;i<l;i++)

{

if(name.charAt(i)==' ')

{

p1=name.charAt(i-2);

}

}

n=rn;

while(n!=0)

{

r=n%10;

s=s+r;

n=n/10;

}

p2=r;

if(r%2==0)

{

p4=r+1;

}

else

{

p4=r;

}

if(r==0)

{

p3='!';

}

if(r==1)

{

p3='@';

}

if(r==2)

{

p3='#';

}

if(r==3)

{

p3='$';

}

if(r==4)

{

p3='%';

}

if(r==5)

{

p3='^';

}

if(r==6)

{

p3='&';

}

if(r==7)

{

p3='\*';

}

if(r==8)

{

p3='(';

}

if(r==9)

{

p3=')';

}

System.out.println("Name="+name);

System.out.println("Room Number="+rn);

System.out.println("Password="+p4+p3+p2+p1);

}

}

**Q.4** Write a Program with a division method who receives two integer

numbers and performs the division operation. The method should

declare that it throws ArithmeticException. This exception should

be handled in the main method

**Sol:**

import java.utill.Scanner;

class MyException

{

void getinput(int a,int b)throws

ArithmeticException

{

int s=a/b;

if(b==0)

throw new

ArithmeticException("AirthmeticException");

else

System.out.println("Result"+s);

}

}

class forthpro

{

public static void main(String args[])throws

ArithmeticException

{

MyException obj=new MyException();

Scanner sn=new Scanner(System.in);

System.out.println("enter first number");

int a=sn.nextInt();

System.out.println("enter second number");

int b=sn.nextInt();

obj.getinput(a,b);

System.out.println("program is completed");

}

}