11. /\*\*

Accept character from command line and perform below

operations. Here you can use charAt() method to extract

character:

    a. Check whether entered character is letter or digit. If it is digit then print its values as

        well as code point.

    b. If it is character then check whether it is in lowercase? If it is in lowercase then convert

        it into upper case and print it well as its code point. If it is in uppercase then convert

        it into lower case and print it well as its code point.

 \*/

class CommandLine{

    public static void main(String[] args){

        int code\_point= args[0].codePointAt(0);

        char ch= args[0].charAt(0);

        //boolean flag=character.isDigit(ch);

        if(Character.isDigit(ch)){

            System.out.println("The entered character is a digit : "+ch);

            System.out.println("Code point is : "+code\_point);

        }

        else if(Character.isLowerCase(ch)){

             System.out.println("The entered character is a digit : "+Character.toUpperCase(ch));

             System.out.println("Code point is : "+code\_point);

        }

        else{

            System.out.println("The entered character is a digit : "+Character.toLowerCase(ch));

             System.out.println("Code point is : "+code\_point);

        }

    }

}

12/\*\*

Write a program to perform below operations on short type to

get:

    a. The number of bits used to represent a short value

    b. The number of bytes used to represent a short value

    c. The minimum value a short

    d. The maximum value a short

 \*/

class Short\_Type{

    public static void main(String a[]){

        System.out.println("The number of bits used to represent a short value    :: "+Short.SIZE);

        System.out.println("The number of bytes used to represent a short value   :: "+Short.BYTES);

        System.out.println("The minimum value a short                             ::"+Short.MIN\_VALUE);

        System.out.println("The maximum value a short                             :: "+Short.MAX\_VALUE);

    }

}

13/\*\*

    Write a program to convert:

        a. short value into String

        b. short value into Short instance.

        c. String instance into Short instance.

 \*/

class Short\_Casting{

    public static void main(String a[]){

        short num=111;

        String str=Short.toString(num);

        System.out.println("short value into String (Boxing) : "+ str);

        System.out.println("short value into Short instance : "+ Short.valueOf(num));

        String str2="112";

        System.out.println("String value into short value (Unboxing) : "+ Short.parseShort(str2));

        System.out.println("String value into Short instance : "+ Short.valueOf(str2));

    }

}

14/\*\*

   .Write a program to convert state of Short instance into byte,

short, int, long, float and double.

 \*/

class Short\_Status{

    public static void main(String[] args){

        short a = 122;

        Short s = new Short(a);

        //shortValue of the Short Object

        byte bv = s.byteValue();

        // printing the output

        System.out.println("byte value of "+ a + " is : " + bv);

        //shortValue of the Short Object

        short sv = s.shortValue();

        // printing the output

        System.out.println("Short value of "+ a + " is : " + sv);

        // intValue of the Short Object

        int iv = s.intValue();

        // printing the output

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

        // longValue of the Short Object

        long lv = s.longValue();

        // printing the output

        System.out.println("Long value of "+ a + " is  : " + lv);

        // floatValue of the Short Object

        float fv = s.floatValue();

        // printing the output

        System.out.println("Float value of "+ a + " is  : " + fv);

        // doubleValue of the Short Object

        double dv = s.doubleValue();

        // printing the output

        System.out.println("Double value of "+ a + " is : " + dv);

    }

}

15/\*\*

    Write a program to perform below operations on int type to

get:

a. The number of bits used to represent a integer value

b. The number of bytes used to represent a integer value

c. The minimum value a integer

d. The maximum value a integer

 \*/

class Int\_Type{

    public static void main(String a[]){

        System.out.println("The number of bits used to represent a integer value    :: "+Integer.SIZE);

        System.out.println("The number of bytes used to represent a integer value   :: "+Integer.BYTES);

        System.out.println("The minimum value a integer                             ::"+(int)Integer.MIN\_VALUE);

        System.out.println("The maximum value a integer                             :: "+(int)Integer.MAX\_VALUE);

    }

}

16/\*\*

    Write a program to convert:

        a. int value into String

        b. int value into Integer instance.

        c. String instance into Integer instance.

        d. int value into binary, octal and hexadecimal string.

 \*/

class Int\_Casting{

    public static void main(String a[]){

        int num=111;

        System.out.println("integer value into String (Boxing) : "+ Integer.toString(num));

        System.out.println("integer value into Integer instance : "+ Integer.valueOf(num));

        String str2="112";

        System.out.println("String instance into Integer instance : "+ Integer.valueOf(str2));

        System.out.println("int value into binary : "+Integer.toBinaryString(num));

        System.out.println("int value into hexadecimal : "+Integer.toHexString(num));

        System.out.println("int value into octal : "+Integer.toOctalString(num));

    }

}

17/\*\*

    Write a program to convert state of Integer instance into

    byte, short, int, long, float and double.

 \*/

class Int\_Status{

    public static void main(String[] args){

        int a = 122;

        Integer i = new Integer(a);

        //byteValue of the Integer Object

        byte bv = i.byteValue();

        // printing the output

        System.out.println("byte value of "+ a + " is : " + bv);

        //shortValue of the Integer Object

        short sv = i.shortValue();

        // printing the output

        System.out.println("Short value of "+ a + " is : " + sv);

        // intValue of the Integer Object

        int iv = i.intValue();

        // printing the output

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

        // longValue of the Integer Object

        long lv = i.longValue();

        // printing the output

        System.out.println("Long value of "+ a + " is  : " + lv);

        // floatValue of the Integer Object

        float fv = i.floatValue();

        // printing the output

        System.out.println("Float value of "+ a + " is  : " + fv);

        // doubleValue of the Integer Object

        double dv = i.doubleValue();

        // printing the output

        System.out.println("Double value of "+ a + " is : " + dv);

    }

}

18/\*\*

    Write a program to find minimum and maximum number as well as

to add two integer numbers using methods of Integer.

 \*/

class Int\_Operations{

    public static void main(String[] a){

        int num1=76, num2=23;

        System.out.println("Maximum using max class level method : "+Integer.max(num1,num2));

        System.out.println("Minimum using min class level method : "+Integer.min(num1,num2));

        System.out.println("Addition using sum class level method : "+Integer.sum(num1,num2));

        // System.out.println("Max : "+((num1>num2)?num1:num2));

        // System.out.println("Min : "+((num1<num2)?num1:num2));

    }

}

19/\*\*

    Write a program to perform below operations on long type to

get:

a. The number of bits used to represent a long value

b. The number of bytes used to represent a long value

c. The minimum value a long

d. The maximum value a long

 \*/

class Long\_Type{

    public static void main(String a[]){

        System.out.println("The number of bits used to represent a long value    :: "+Long.SIZE);

        System.out.println("The number of bytes used to represent a long value   :: "+Long.BYTES);

        System.out.println("The minimum value a long                             ::"+(long)Long.MIN\_VALUE);

        System.out.println("The maximum value a long                             :: "+(long)Long.MAX\_VALUE);

    }

}

20/\*\*

    Write a program to convert:

        a. long value into String

        b. long value into Long instance.

        c. String instance into Long instance.

        d. long value into binary, octal and hexadecimal string.

 \*/

class Long\_Casting{

    public static void main(String a[]){

        long num=111000111;

        System.out.println("long value into String (Boxing) : "+ Long.toString(num));

        System.out.println("long value into Long instance : "+ Long.valueOf(num));

        String str2="112";

        System.out.println("String instance into long instance : "+ Long.valueOf(str2));

        System.out.println("long value into binary : "+Long.toBinaryString(num));

        System.out.println("long value into hexadecimal : "+Long.toHexString(num));

        System.out.println("long value into octal : "+Long.toOctalString(num));

    }

}

21/\*\*

    Write a program to convert state of Long instance into byte,

short, int, long, float and double.

 \*/

 class Long\_Status{

    public static void main(String[] args){

        long a = 122;

        Long l = new Long(a);

        //byteValue of the Long Object

        byte bv = l.byteValue();

        // printing the output

        System.out.println("byte value of "+ a + " is : " + bv);

        //shortValue of the Long Object

        short sv = l.shortValue();

        // printing the output

        System.out.println("Short value of "+ a + " is : " + sv);

        // intValue of the Long Object

        int iv = l.intValue();

        // printing the output

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

        // longValue of the Long Object

        long lv = l.longValue();

        // printing the output

        System.out.println("Long value of "+ a + " is  : " + lv);

        // floatValue of the Long Object

        float fv = l.floatValue();

        // printing the output

        System.out.println("Float value of "+ a + " is  : " + fv);

        // doubleValue of the Long Object

        double dv = l.doubleValue();

        // printing the output

        System.out.println("Double value of "+ a + " is : " + dv);

    }

}

22/\*\*

    Write a program to find minimum and maximum number as well as

to add two long numbers using methods of Long.

 \*/

class Long\_Operations{

    public static void main(String[] a){

        long num1=1376, num2=23233;

        System.out.println("Maximum using max class level method : "+Long.max(num1,num2));

        System.out.println("Minimum using min class level method : "+Long.min(num1,num2));

        System.out.println("Addition using sum class level method : "+Long.sum(num1,num2));

    }

}

23/\*\*

    Write a program to perform below operations on float type to

get:

a. The number of bits used to represent a float value

b. The number of bytes used to represent a float value

c. The minimum value a float

d. The maximum value a float

 \*/

class Float\_Type{

    public static void main(String a[]){

        System.out.println("The number of bits used to represent a float value    :: "+Float.SIZE);

        System.out.println("The number of bytes used to represent a float value   :: "+Float.BYTES);

        System.out.println("The minimum value a float                             ::"+(float)Float.MIN\_VALUE);

        System.out.println("The maximum value a float                             :: "+(float)Float.MAX\_VALUE);

    }

}

24/\*\*

    .Write a program to convert:

        a. float value into String

        b. float value into Float instance.

        c. String instance into Float instance.

        d. float value into hexadecimal string.

 \*/

class Float\_Casting{

    public static void main(String a[]){

        float num=10.3f;

        System.out.println("Float value into String (Boxing) : "+ Float.toString(num));

        System.out.println("Float value into Float instance : "+ Float.valueOf(num));

        String str2="11.8f";

        System.out.println("String instance into Float instance : "+ Float.valueOf(str2));

        System.out.println("Float value into hexadecimal : "+Float.toHexString(num));

    }

}

25/\*\*

    Write a program to convert state of Float instance into byte,

short, int, long, float and double.

 \*/

class Float\_Status{

    public static void main(String[] args){

        float a = 122;

        Float f = new Float(a);

        //byteValue of the Float Object

        byte bv = f.byteValue();

        // printing the output

        System.out.println("byte value of "+ a + " is : " + bv);

        //shortValue of the Float Object

        short sv = f.shortValue();

        // printing the output

        System.out.println("Short value of "+ a + " is : " + sv);

        // intValue of the Float Object

        int iv = f.intValue();

        // printing the output

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

        // longValue of the Float Object

        long lv = f.longValue();

        // printing the output

        System.out.println("Long value of "+ a + " is  : " + lv);

        // floatValue of the Float Object

        float fv = f.floatValue();

        // printing the output

        System.out.println("Float value of "+ a + " is  : " + fv);

        // doubleValue of the Float Object

        double dv = f.doubleValue();

        // printing the output

        System.out.println("Double value of "+ a + " is : " + dv);

    }

}

26/\*\*

    Write a program to find minimum and maximum number as well as

to add two float numbers using methods of Float.

 \*/

 class Float\_Operations{

    public static void main(String[] a){

        float num1=13.76f, num2=23.233f;

        System.out.println("Maximum using max class level method : "+Float.max(num1,num2));

        System.out.println("Minimum using min class level method : "+Float.min(num1,num2));

        System.out.println("Addition using sum class level method : "+Float.sum(num1,num2));

    }

}

27/\*\*

    Write a program to perform below operations on Double type to

get:

a. The number of bits used to represent a double value

b. The number of bytes used to represent a double value

c. The minimum value a double

d. The maximum value a double

 \*/

 class Double\_Type{

    public static void main(String a[]){

        System.out.println("The number of bits used to represent a integer value    :: "+Double.SIZE);

        System.out.println("The number of bytes used to represent a integer value   :: "+Double.BYTES);

        System.out.println("The minimum value a integer                             ::"+(double)Double.MIN\_VALUE);

        System.out.println("The maximum value a integer                             :: "+(double)Double.MAX\_VALUE);

    }

}

28/\*\*

    Write a program to convert:

        a. double value into String

        b. double value into Double instance.

        c. String instance into Double instance.

        d. double value into binary, octal and hexadecimal string(Note: Here you can use

            doubleToLongBits() method along with methods of Long class).

 \*/

 class Double\_Casting{

    public static void main(String a[]){

        double num=111.0987;

        System.out.println("Double value into String (Boxing) : "+ Double.toString(num));

        System.out.println("Double value into Double instance : "+ Double.valueOf(num));

        String str2="112.875";

        System.out.println("String instance into Double instance : "+ Double.valueOf(str2));

        System.out.println("long value into binary : "+Long.toBinaryString(Double.doubleToLongBits(num)));

        System.out.println("long value into hexadecimal : "+Long.toHexString(Double.doubleToLongBits(num)));

        System.out.println("long value into octal : "+Long.toOctalString(Double.doubleToLongBits(num)));

    }

}

29/\*\*

    Write a program to convert state of Double instance into byte,

short, int, long, float and double.

 \*/

class Double\_Status{

    public static void main(String[] args){

        double a = 12.342;

        Double d = new Double(a);

        //byteValue of the Double Object

        byte bv = d.byteValue();

        // printing the output

        System.out.println("byte value of "+ a + " is : " + bv);

        //shortValue of the Double Object

        short sv = d.shortValue();

        // printing the output

        System.out.println("Short value of "+ a + " is : " + sv);

        // intValue of the Double Object

        int iv = d.intValue();

        // printing the output

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

        // longValue of the Double Object

        long lv = d.longValue();

        // printing the output

        System.out.println("Long value of "+ a + " is  : " + lv);

        // floatValue of the Double Object

        float fv = d.floatValue();

        // printing the output

        System.out.println("Float value of "+ a + " is  : " + fv);

        // doubleValue of the Double Object

        double dv = d.doubleValue();

        // printing the output

        System.out.println("Double value of "+ a + " is : " + dv);

    }

}

30/\*\*

    Write a program to find minimum and maximum number as well as

to add two double numbers using methods of Double

 \*/

  class Double\_Operations{

    public static void main(String[] a){

        double num1=13.76, num2=23.233;

        System.out.println("Maximum using max class level method : "+Double.max(num1,num2));

        System.out.println("Minimum using min class level method : "+Double.min(num1,num2));

        System.out.println("Addition using sum class level method : "+Double.sum(num1,num2));

    }

}

32/\*\*

    Write a program to accept and print full name as an argument

from command line

 \*/

 class Full\_Name{

    public static void main(String[] args){

        System.out.println("Hello !! "+args[0]);

    }

 }

33/\*\*

   Pass integer, float and double value from command line. Parse

it appropriately and perform arithmetic operations (+,-,\*,/)

on it. Here you can you switch case.

 \*/

import java.util.\*;

 class Switch\_Prog{

    public static void main(String args[]){

        int num1=Integer.parseInt(args[0]);

        float num2=Float.parseFloat(args[1]);

        double num3=Double.parseDouble(args[2]);

        int ch;

        Scanner sc=new Scanner(System.in);

        do{

            System.out.println("Operations to perform: ");

            System.out.println("1. Add");

            System.out.println("2. Sub");

            System.out.println("3. Mult");

            System.out.println("4. Div");

            System.out.println("5. Exit");

            System.out.println("Enter you choice : ");

            ch=sc.nextInt();

            switch(ch){

                case 1: System.out.println("The Addition is : "+(double)(num1+num2+num3));

                break;

                case 2: System.out.println("The Substraction is : "+(double)(num1-num2-num3));

                break;

                case 3: System.out.println("The Multiplication is : "+(double)(num1\*num2\*num3));

                break;

                case 4: System.out.println("The Division is : "+(double)((num1/num2)/num3));

                break;

                default: System.out.println("Please enter valid choice");

            }

        }while(ch<5);

    }

 }