**Lab Tasks**

Marks : 10, All Questions carry equal marks

Exercises

1. Write a Java program to concatenate a given string to the end of another string
2. public static void concate\_String(String message)
3. {
4. String msg = "this is first line in method already ";
5. System.***out***.println( msg.concat(message));
7. }
8. Write a program which calculates unit prices on the basis of following conditions

1-100 units price = 5 rupess

101-200 units price = 10 rupees

200-500 units prices = 20 rupees

Units>500 prices = 50 rupees

* public static void unitPrice(int unit)
* {
* if (unit > 0 && unit <= 100 )
* {
* System.***out***.println("This would be your price for your units "+unit\*5);
* }
* else if (unit > 100 && unit < 200)
* {
* System.***out***.println("This would be your price for your units "+unit\*10);
* }
* else if (unit > 200 && unit < 500)
* {
* System.***out***.println("This would be your price for your units "+unit\*20);
* }
* else
* System.***out***.println("This would be your price for your units "+unit\*50);
* }

1. Write a Java program to replace each substring of below given sample string
   1. Sample string : "The quick brown fox jumps over the lazy dog."
   2. In the above string replace all the fox with cat
2. Write a Java program which calculate possible notes 1000, 500, 100, and fifty rupees

Enter any number: 6700

Output

Thousands: 6

Five Hundreds: 1

Hundreds : 2

Fifty : 0

public static void possibleNotes(int num)

{

int thousands = num / 1000;

int fiveHundred = (num - (thousands\* 1000)) / 500;

int hundred = (num - (thousands\* 1000 + fiveHundred)) / 100;

int fifty = (num - (thousands\* 1000 + fiveHundred + hundred\*100) / 50);

System.***out***.println("notes of 1000`s are =" + thousands );

System.***out***.println("notes of 500`s are =" + fiveHundred );

System.***out***.println("notes of 100`s are =" + hundred );

System.***out***.println("notes of 50`s are =" + fifty);

}

1. Write a program which calculate the factorial of any number.

Enter any number : 4

Output: 24

public static void factorial(int num)

{

int index = 2;

while(true)

{

if (num % index == 0)

{

System.***out***.print(index);

System.***out***.print(",");

index++;

}

}

}

1. Write a program which calculate total characters,and words in the string

Enter any string: Asif Ali

Total words: 2

Total characters: 8

public static void count(String msg)

{

int count = 1;

for (int i = 0; i < msg.length(); i++)

{

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

{

count++;

}

}

System.***out***.println(msg+" = size = "+ msg.length());

System.***out***.println(msg+" = charactors are = " + count );

}

Whole code:

public class Lab2 {

//1.Write a Java program to concatenate a given string to the end of another string

public static void concate\_String(String message)

{

String msg = "this is first line in method already ";

System.***out***.println( msg.concat(message));

}

// 2. Write a program which calculates unit prices on the basis of following conditions

// 1-100 units price = 5 rupess

// 101-200 units price = 10 rupees

// 200-500 units prices = 20 rupees

// Units>500 prices = 50 rupees

public static void unitPrice(int unit)

{

if (unit > 0 && unit <= 100 )

{

System.***out***.println("This would be your price for your units "+unit\*5);

}

else if (unit > 100 && unit < 200)

{

System.***out***.println("This would be your price for your units "+unit\*10);

}

else if (unit > 200 && unit < 500)

{

System.***out***.println("This would be your price for your units "+unit\*20);

}

else

System.***out***.println("This would be your price for your units "+unit\*50);

}

// 9. Write a Java program to replace each substring of below given sample string

// a. Sample string : "The quick brown fox jumps over the lazy dog."

// b. In the above string replace all the fox with cat

public static void replaceString(String msg)

{

System.***out***.println(msg.replace("fox","cat"));

}

// 15. Write a Java program which calculate possible notes 1000, 500, 100, and fifty rupees

// Enter any number: 6700

// Output

// Thousands: 6

// Five Hundreds: 1

// Hundreds : 2

// Fifty : 0

public static void possibleNotes(int num)

{

int thousands = num / 1000;

int fiveHundred = (num - (thousands\* 1000)) / 500;

int hundred = (num - (thousands\* 1000 + fiveHundred)) / 100;

int fifty = (num - (thousands\* 1000 + fiveHundred + hundred\*100) / 50);

System.***out***.println("notes of 1000`s are =" + thousands );

System.***out***.println("notes of 500`s are =" + fiveHundred );

System.***out***.println("notes of 100`s are =" + hundred );

System.***out***.println("notes of 50`s are =" + fifty);

}

//

// 16. Write a program which calculate the factorial of any number.

// Enter any number : 4

// Output: 24

public static void factorial(int num)

{

int index = 2;

while(true)

{

if (num % index == 0)

{

System.***out***.print(index);

System.***out***.print(",");

index++;

}

}

}

//

// 12. Write a program which calculate total characters,and words in the string

// Enter any string: Asif Ali

// Total words: 2

// Total characters: 8

public static void count(String msg)

{

int count = 1;

for (int i = 0; i < msg.length(); i++)

{

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

{

count++;

}

}

System.***out***.println(msg+" = size = "+ msg.length());

System.***out***.println(msg+" = charactors are = " + count );

}

public static void main(String[] args) {

String message = "this is line coming from user mean 2nd line this is ...";

// functions calling

Lab2.*concate\_String*(message);

Lab2.*unitPrice*(20);

Lab2.*unitPrice*(100);

Lab2.*unitPrice*(400);

Lab2.*unitPrice*(500);

Lab2.*replaceString*("A quick brown fox jumps over the lazy dog");

Lab2.*factorial*(6);

Lab2.*count*("This is message and its size will be displaid along with charachters in it along with spaces counted");

Lab2.*possibleNotes*(6700);

}

}