

Experiment NO:01

Experiment Name: How to install JDK & NETBINS.

প্রথমে আমাদেরকে JDK & NETBINS ইন্টারনেট থেকে আপডেইট ভার্সনটা ডাউনলোড করে নিতে হবে। তার পর চিত্রের ধাপ অনুযায়ী ইনস্টল করে নিতে হবে। ডাউনলোড হয়ে গেলে ফাইলটিতে রাইট বাটন ক্লিক করতে হবে।

আমরা যখন ফাইলটিতে রাইট বাটন ক্লিক করব তখন একটি মেনু আসবে। আমরা চিত্রের ন্যায় ধাপ গুলো অতিক্রম করে যাব। এখানে একটা কথা বলে রাখি যে আমরা একই JDK & NETBINS একই সাথে ডাউনলোড করে রেখেছি।

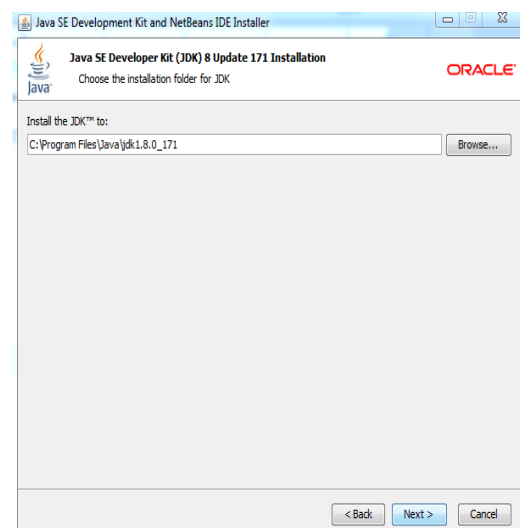
JDK & NETBINS Download link:

<https://www.oracle.com/technetwork/java/javase/downloads/jdk-7-netbeans-download-432126.html>

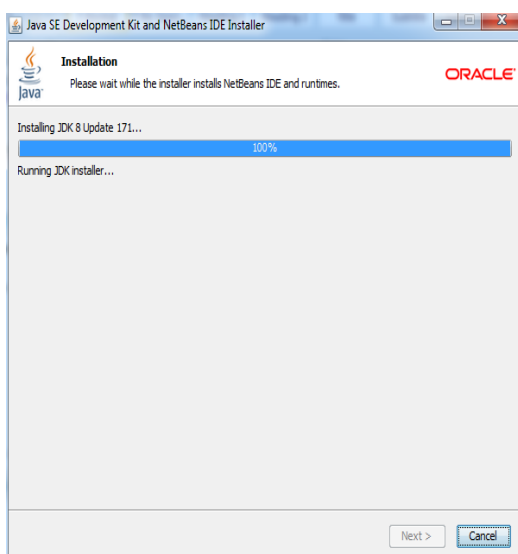
কম্পিউটারের কনফিগার অনুযায়ী ডাউনলোড করে নিতে হবে।



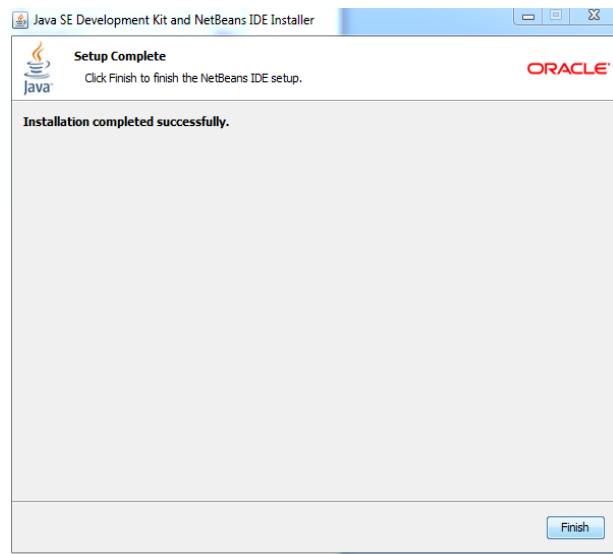
Step: 1



Step: 2



Step: 3



Step: 4

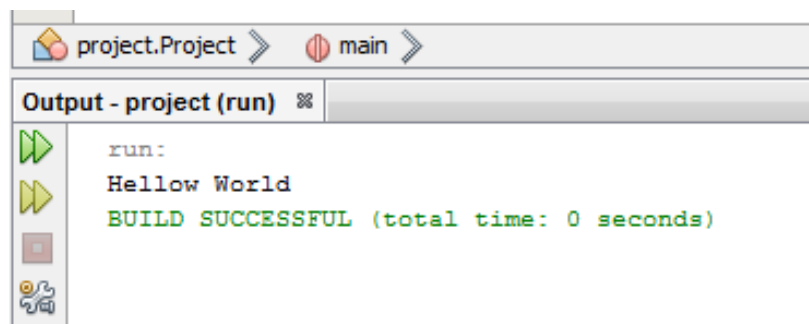
Experiment NO: 02

Experiment Name: To Display “Hello World”

Code:

```
Package project;  
Public class project {  
Public static void main (String [] args){  
System.out.println(“Hellow world”);  
}  
}
```

Output:



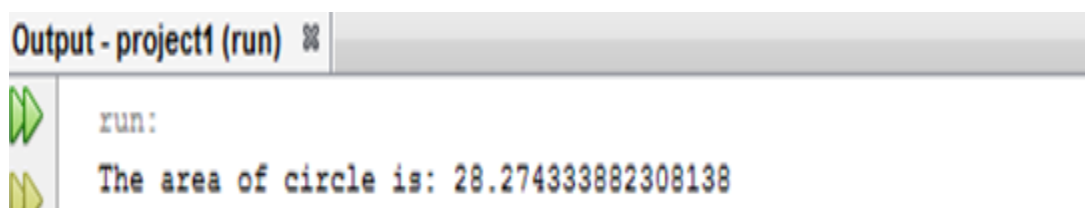
Experiment NO: 03

Experiment Name: Writing a program, How to print Circle Area.

Code:

```
Package project;  
Public class project {  
Public static void main (String [] args){  
int radius =3;  
double area=Math.PI* (radius* radius);  
System.out.println("The area of circle is:"* area);  
Double Circle=Math.PI.*2*radius;  
System.out.println("The circle area is: "+Circle);  
}  
}
```

Output



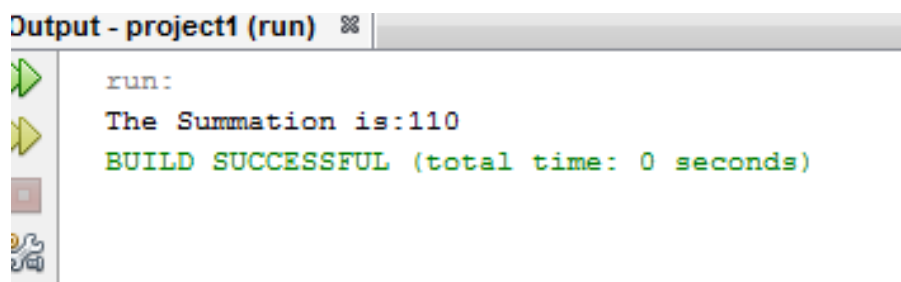
Experiment NO: 04

Experiment Name: Write a program Adding two integer numbers.

Coder:

```
Package project;  
Public class project {  
Public static void main (String [] args){  
int a=50, b=60, sum;  
{  
Sum=(a+b);  
System.out.println("The summation is:"+Sum);  
}  
}  
}
```

Output



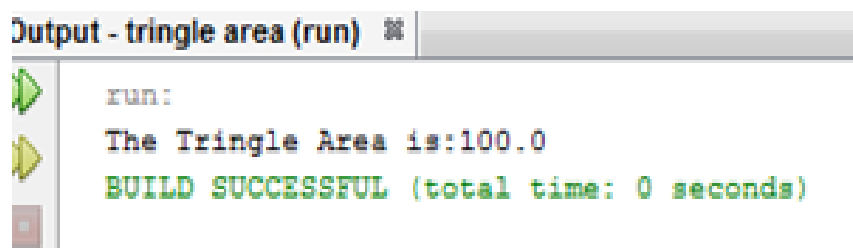
Experiment NO:0 5

Experiment Name: Write a program, How to Display Triangle Area.

Coder:

```
Package project;  
  
Public class project {  
  
Public static void main (String [] args){  
  
int base=10;  
  
int hight=20;  
  
double area=(base* hight)/2;  
  
System.out.println("The Tringle area is:"+area);  
  
}  
  
}
```

Output:



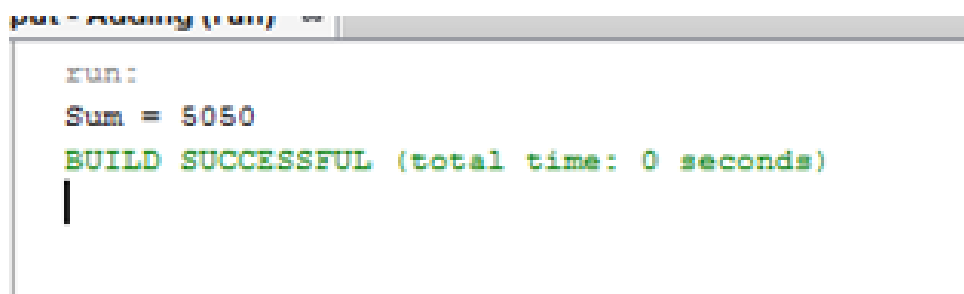
Experiment NO: 06

Experiment Name: To display in sum 1 to 100 number.

Code:

```
pacakage adding;  
  
public class Adding{  
  
    public static void main (String []args){  
  
        int num=100, sum =0;  
  
        for (int i=1; i<=num: ++i)  
  
        {  
  
            Sum +=i;  
  
        }  
  
        System.out.println("Sum= "Sum);  
  
    }  
  
}
```

Output



```
Run - Adding (run)
Sum = 5050
BUILD SUCCESSFUL (total time: 0 seconds)
```

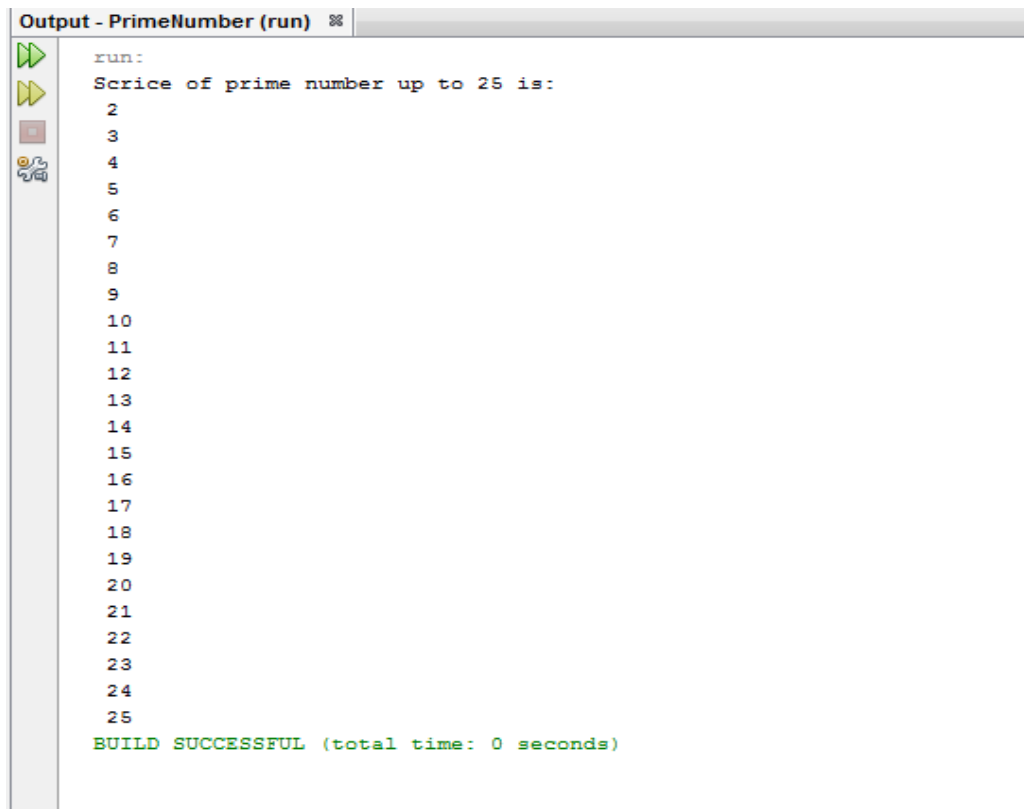
Experiment NO:07

Experiment Name: To display in 1 to 25 prime number.

Code:

```
package primenumber;
public class PrimeNumber{
public static void main(String [] args){
int i, j;
system.out.println("series of prime number up to 25is : ");
for(i=2; i<=25; i++)
{
for(j=2; j<=i; j++)
}
if(i%j==0);
break;
}
if (i==j);
System.out.println(" " +i+" ")
} } }
```

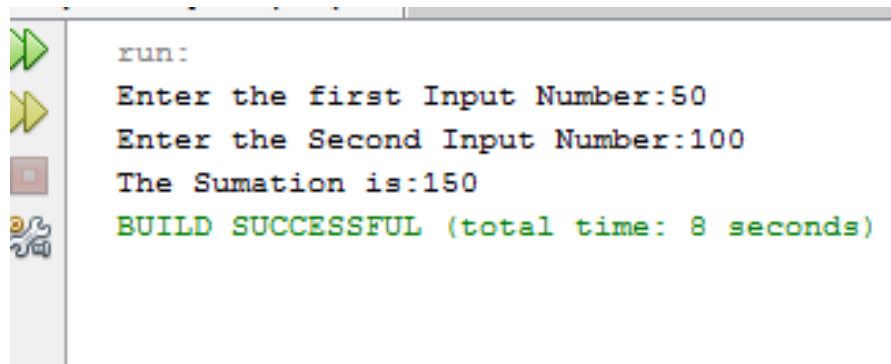
Output



```
Output - PrimeNumber (run)
run:
Scrice of prime number up to 25 is:
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
BUILD SUCCESSFUL (total time: 0 seconds)
```

Experiment NO: 08**Experiment Name: Input two integer number and Display summation.****Code:**

```
package project2;  
import java.util.Scanner;  
public class Project2 {  
    public static void main(String[] args) {  
        Scanner sc=new Scanner(System.in);  
        System.out.print("Enter the first Input Number:");  
        int Number1=sc.nextInt();  
        System.out.print("Enter the Second Input Number:");  
        int Number2=sc.nextInt();  
        int sum = Number1+Number2;  
        System.out.println("The Sumation is:"+sum);  
    }  
}
```

Output

```
run:  
Enter the first Input Number:50  
Enter the Second Input Number:100  
The Sumation is:150  
BUILD SUCCESSFUL (total time: 8 seconds)
```

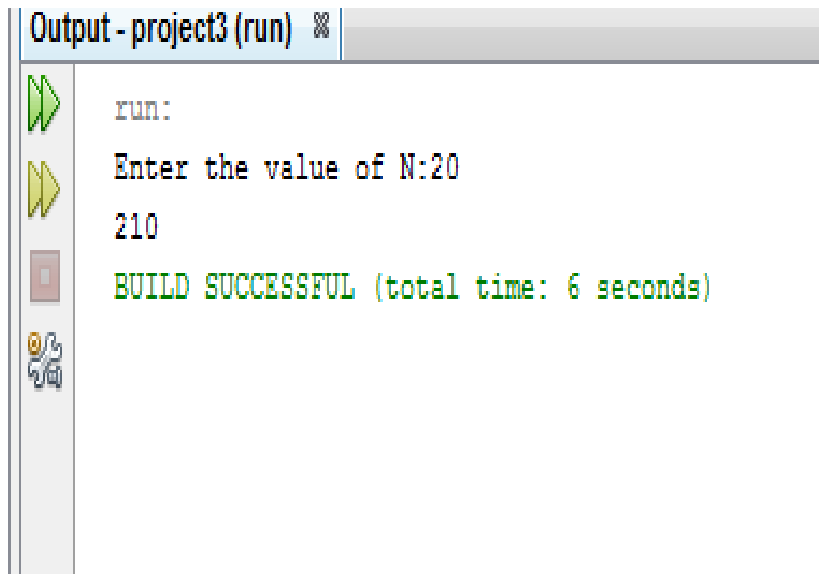

Experiment NO: 09

Experiment Name: N সংখ্যক সংখ্যা ইনপুট নিয়ে তার যোগফল বের করার জাভা ভাষায় একটি প্রোগ্রাম।

Code:

```
package project3;  
import java.util.Scanner;  
public class Project3 {  
    public static void main(String[] args) {  
        Scanner sc=new Scanner(System.in);  
        int i, sum=0;  
        System.out.print("Enter the value of N:");  
        int n=sc.nextInt();  
        for(i=1; i<=n; i++)  
        {  
            sum=sum+i;  
        }  
        System.out.println(sum);  
    }  
}
```

Output



The screenshot shows the 'Output - project3 (run)' window of a Java IDE. It contains the following text:

```
run:  
Enter the value of N:20  
210  
BUILD SUCCESSFUL (total time: 6 seconds)
```

On the left side of the output window, there are four icons: a green play button, a yellow play button, a red stop button, and a bug icon.

Experiment NO: 10

Experiment Name: Logical or Operator ব্যবহার করে Vowel or consonant বের করার প্রোগ্রাম।

Code:

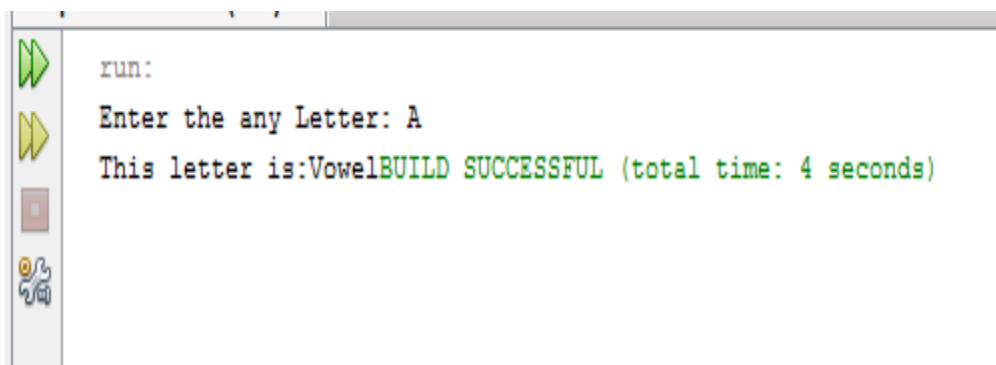
```
package basicjava;

import java.util.Scanner;

public class VowelConsonentDemo {
    public static void main(String[] args) {
        Scanner input=new Scanner(System.in);
        char ch;
        System.out.print("Enter the any Letter: ");
        ch = input.next().charAt(0);

        if( ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u' || ch=='A' || ch=='E' || ch=='I' ||
ch=='O' || ch=='U')
        {
            System.out.print("This letter is:");
            System.out.print("Vowel");
        }
        else{
            System.out.print("This letter is:");
            System.out.print("Consonent");
        }
    }
}
```

Output:



Experiment NO: 11

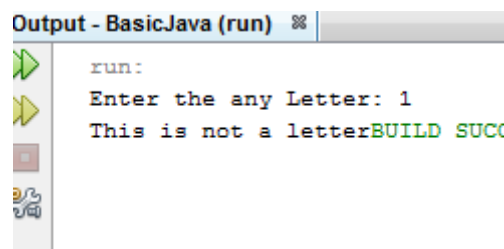
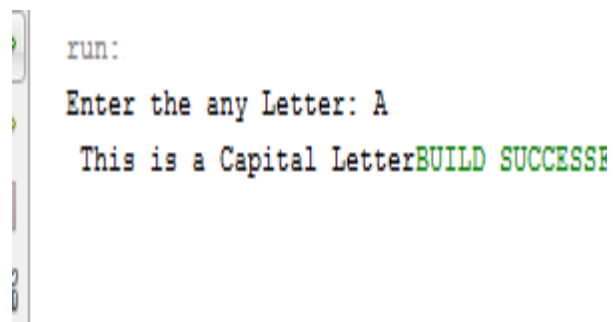
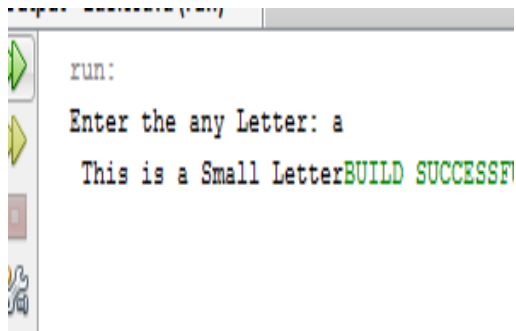
Experiment Name: Logical AND Operator ব্যবহার করে Capital or Small letter বের করার প্রোগ্রাম।

Code:

```
package basicjava;
import java.util.Scanner;
public class CapitalSmallDemo {
    public static void main(String[] args) {
        Scanner input =new Scanner(System.in);
        char ch;
        System.out.print("Enter the any Letter: ");
        ch = input.next().charAt(0);

        if(ch>='a' && ch<='z')
        {
            System.out.print(" This is a Small Letter");
        }
        else if(ch>='A' && ch<='Z')
        {
            System.out.print(" This is a Capital Letter");
        }
        else{
            System.out.print("This is not a letter");
        }
    }
}
```

Output



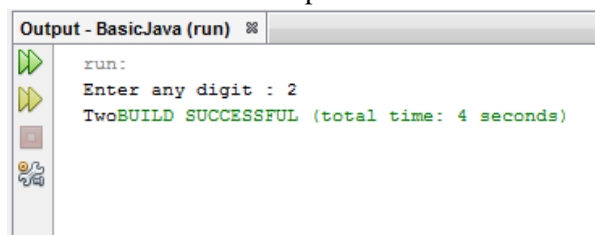
Experiment NO: 12

Experiment Name: Switch condition ব্যবহার করে digit বের করার প্রোগ্রাম।

Program:

```
package basicjava;
import java.util.Scanner;
public class SwitchDemo {
    public static void main(String[] args){
        Scanner sc=new Scanner(System.in);
        int digit;
        System.out.print("Enter any digit : ");
        digit = sc.nextInt();
        switch (digit){
            case(0):
                System.out.print("Zero");
                break;
            case(1):
                System.out.print("One");
                break;
            case(2):
                System.out.print("Two");
                break;
            case(3):
                System.out.print("Tree");
                break;
            case(4):
                System.out.print("Four");
                break;
            case(5):
                System.out.print("Five");
                break;
            case(6):
                System.out.print("Six");
                break;
            case(7):
                System.out.print("Seven");
                break;
            case(8):
                System.out.print("Eight");
                break;
            case(9):
                System.out.print("Nine");
                break;
            default:
                System.out.print("this is not digit");
                break;
        }
    }
}
```

Output:



```
Output - BasicJava (run)
run:
Enter any digit : 2
TwoBUILD SUCCESSFUL (total time: 4 seconds)
```

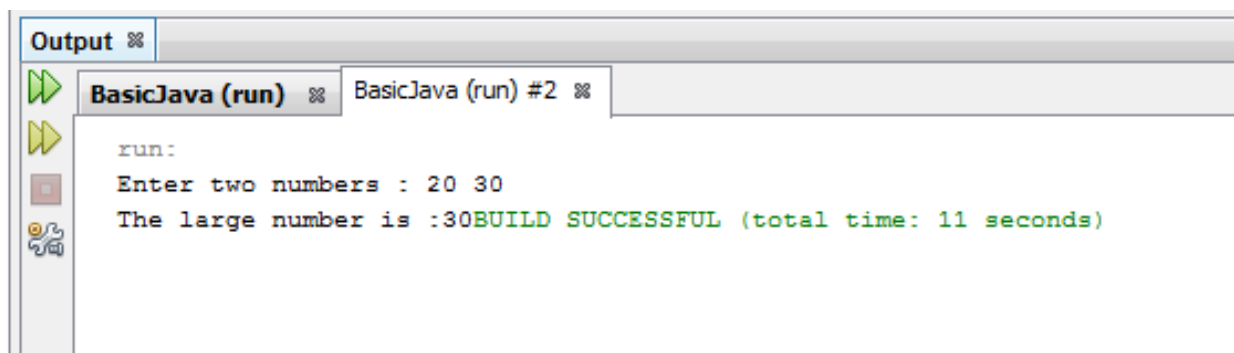
Experiment NO: 13

Experiment Name: conditional condition ব্যবহার করে দুই সংখ্যার মধ্যে বড় সংখ্যাটি বের করার প্রোগ্রাম বের করার প্রোগ্রাম।

Program:

```
package basicjava;  
import java.util.Scanner;  
public class ConditionalDemo {  
    public static void main(String []args){  
        Scanner input=new Scanner(System.in);  
        int num1, num2, large;  
        System.out.print("Enter two numbers : ");  
        num1 =input.nextInt();  
        num2 =input.nextInt();  
        large=( num1> num2)? num1: num2;  
        System.out.print("The large number is :"+large);  
    }  
}
```

Output:



```
Output ✖  
BasicJava (run) ✖ BasicJava (run) #2 ✖  
run:  
Enter two numbers : 20 30  
The large number is :30BUILD SUCCESSFUL (total time: 11 seconds)
```

Experiment NO: 13

Experiment Name: for loop ব্যবহার করে জাভা ভাষায় একটি প্রোগ্রাম লিখ।

Code:

```
package basicjava;

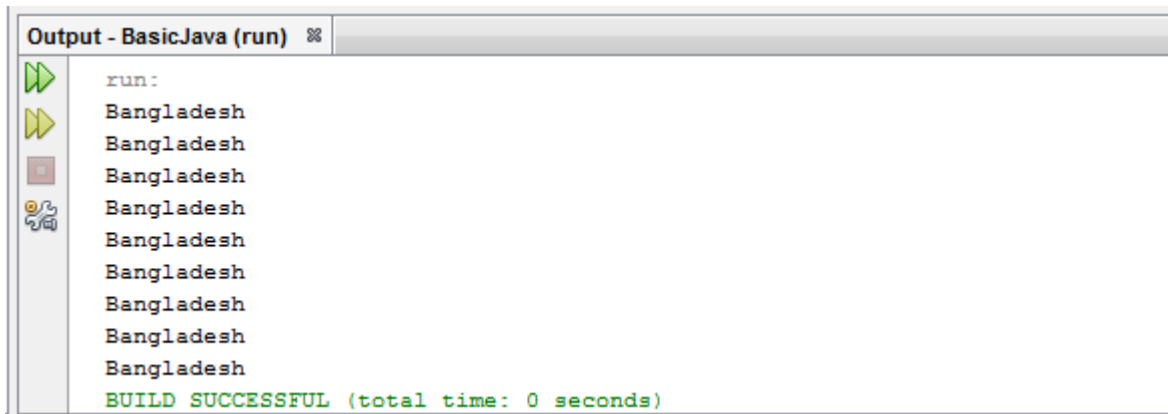
public class ForLoopDemo {

    public static void main(String args[]){

        for( int i=1; i<10; i++){
            System.out.println("Bangladesh");
        }
    }

}
```

Output:



```
Output - BasicJava (run) x
run:
Bangladesh
Bangladesh
Bangladesh
Bangladesh
Bangladesh
Bangladesh
Bangladesh
Bangladesh
Bangladesh
Bangladesh
BUILD SUCCESSFUL (total time: 0 seconds)
```

