Practical 6

Name:Satishkumar Rajan Nadar

Aim:Diffie Hellman key Exchange

package insprac6;

import java.util.\*;

public class ins\_practical6 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter the value of p");

int p = sc.nextInt();

System.out.println("Enter the value of g");

int g=sc.nextInt();

System.out.println("select 1st secret no of Alice");

int a=sc.nextInt();

System.out.println("select 2nd secret no of Bob");

int b=sc.nextInt();

int A = (int)Math.pow(g,a)%p;

int B = (int)Math.pow(g,b)%p;

int S\_A = (int)Math.pow(B,a)%p;

int S\_B = (int)Math.pow(A,b)%p;

if (S\_A==S\_B){

System.out.println("They shared a secret key is = "+S\_A);}

else{

System.out.println("Alice and Bob cannot exchange information with each other");

}

}

}

