**public** **class** Rec {

 **public** **static** **void** main(String[] args) {

 *printReverse*(5);

 System.***out***.println(*fib*(20));

 *print*(5);

 **int** a[] = {2,3,0,0,3,2};

 System.***out***.println(*checkPal*(a,0,a.length));

 String s = "aNaNaf";

 System.***out***.println("Palindrom "+*isPalString*(s));

 System.***out***.println(*reverseString*("Majdi"));

 System.***out***.println(*reverse*("Majdi"));

 }

 **public** **static** **void** printReverse(**int** n){

 **if** (n > 0)

 *printReverse*(n-1);

 System.***out***.println(n);

 }

 **public** **static** void print(**int** n)

 {

 **if** (n==0)

 System.***out***.println(n);

 **else**{

 System.***out***.println(" "+n);

 *print*(n-1);

 }

 }

 **public** **static** int fib(**int** n)

 {

 **if** (n == 0 || n == 1)

 **return** 1;

 **else**

 **return** *fib*(n-1)+*fib*(n-2);

 }

 **public** **static** boolean checkPal(**int** a[],**int** i, **int** j)

 {

 **if**(a.length == 0 || a.length == 1 || i>=j)

 **return** **true**;

 **if**(a[i] != a[j-1])

 **return** **false**;

 **return** *checkPal*(a, ++i, --j);

 }

 **public** **static** **boolean** isPalString(String s){

 **if**(s.length() == 0 || s.length() == 1)

 **return** **true**;

 **if**(s.charAt(0) == s.charAt(s.length()-1))

 **return** *isPalString*(s.substring(1, s.length()-1));

 **return** **false**;

 }

 **private** **boolean** checkPrime(**int** n){

 **if**(n > 1)

 **return** \_checkPrime(n, 2);

 **else**

 **return** **false**;

 }

 **private** **boolean** \_checkPrime(**int** n, **int** m){

 **if**(m == n)

 **return** **true**;

 **else**{

 **if**(n % m == 0)

 **return** **false**;

 **else**

 **return** \_checkPrime(n, m+1);

 }

 }

 **public** **static** String reverseString(String s){

 **if**(s.length() <= 1 || s == **null**)

 **return** s;

 **else**{

 // str = str+s.charAt(s.length()-1);

 **return** s.charAt(s.length()-1)+*reverseString*(s.substring(0,s.length()-1));

 }

 }

 **public** **static** String reverse(String str) {

 **if** ((**null** == str) || (str.length() <= 1)) {

 **return** str;

 }

 **return** *reverse*(str.substring(1)) + str.charAt(0);

 }

 /\*reverse("Hello")

 (reverse("ello")) + "H"

 ((reverse("llo")) + "e") + "H"

 (((reverse("lo")) + "l") + "e") + "H"

 ((((reverse("o")) + "l") + "l") + "e") + "H"

 (((("o") + "l") + "l") + "e") + "H"

 "olleH"

 \*/

 **public** **static** **int** countZeros(**int**[] x, **int** len) {

 **if** (len == 0)

 **return** x[0] == 0 ? 1: 0;

 **else** **if** (x[len] == 0)

 **return** 1 + *countZeros*(x, len - 1);

 **else**

 **return** *countZeros*(x, len - 1);

 }

 **public** **static** **int** sumArray(**int**[ ] x, **int** index){

 **if**(index < 0)

 **return** 0;

 **else** {

 **return** x[index]+*sumArray*(x,index - 1);

 }

 }

 **public** **static** **int** power(**int** base, **int** exponent)

 {

 **if**(exponent == 0)

 **return** 1;

 **else**

 {

 **return** base \* *power*(base, exponent - 1);

 }

 }

 **public** **static** **int** gcd(**int** m, **int** n){

 **if**(m % n == 0)

 **return**(n);

 **else**

 **return**(*gcd*(n,m % n));

 }

}