**Q1**

**public** **class** Replace {

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

Scanner s = **new** Scanner(System.***in***);

//System.out.println("Java is a language");

String str = **new** String("Java is a language");

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

System.***out***.println("Enter the character to be replaced:");

**char** ch1 = s.next().charAt(0);

System.***out***.println("Enter the character to be replaced with:");

**char** ch2 = s.next().charAt(0);

**char** arr[] = **new** **char**[str.length()];

**for**(**int** i=0;i<str.length();i++){

arr[i]=str.charAt(i);

}

**for**(**int** i=0;i<str.length();i++){

**if**(arr[i]==ch1){

arr[i] = ch2;

}

}

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

System.***out***.print(arr[i]);

}

}

**Q2**

**package** basic\_PF;

**import** java.util.Scanner;

**public** **class** RemainderQoutient {

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

Scanner s = **new** Scanner(System.***in***);

**int** remainder=0,qoutient=0;

**int** count=0;

System.***out***.println("Enter dividend:");

**int** num1=s.nextInt();

System.***out***.println("Enter divisor:");

**int** num2=s.nextInt();

**while**(num1>=num2){

num1=num1-num2;

count++;

**if**(num1<num2){

remainder=num1;

**break**;

}

}

System.***out***.println("Qoutient:"+count);

System.***out***.println("Remainder:"+remainder);

}

}

**Q3**

**package** basic\_PF;

**import** java.util.Scanner;

**public** **class** Substring {

String str="Hello World";

**char** arr[];

Substring(){

arr=str.toCharArray();

}

**public** **void** subscript1(**int** in,**int** out){

**if**(in<out){

**for**(**int** j=in;j<=out;j++){

System.***out***.println(arr[j]);

}

}**else** {

System.***out***.println("Invalid");

}

}

**public** **void** subscript2(**int** in,**int** out){

**if**(in+out<str.length()){

**for**(**int** j=in ;j<=in+out;j++){

System.***out***.print(arr[j]);

}

}**else**{

System.***out***.println("Value exceeding string size , enter valid values again to find a substring.");

}

}

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

Scanner s = **new** Scanner(System.***in***);

String str="Hello World";

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

**char** arr[]=**new** **char**[str.length()];

**for**(**int** i=0;i<str.length();i++){

arr[i]=str.charAt(i);

}

System.***out***.println("Enter the initial index:");

**int** in = s.nextInt();

System.***out***.println("Enter the final index");

**int** out = s.nextInt();

Substring ob=**new** Substring();

// ob.subscript1(in, out);

ob.subscript2(in,out);

}

}

**Q4**

**package** basic\_PF;

**import** java.util.Scanner;

**public** **class** RecursiveFib {

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

**int** num1=0;

**int** num2=1;

**if**(n==0){

**return** num1;

}

**if**(n==1){

**return** num2;

}

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

}

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

Scanner s = **new** Scanner(System.***in***);

System.***out***.println("Enter the fibonacci term:");

**int** n=s.nextInt();

**for**(**int** i=0;i<n;i++){

System.***out***.print(" "+*fib*(i));

}

}

}

**Q5**

**package** basic\_PF;

**import** java.util.Scanner;

**public** **class** NumSum {

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

Scanner s = **new** Scanner(System.***in***);

System.***out***.println("Enter the starting number");

**int** start = s.nextInt();

System.***out***.println("Enter the ending number");

**int** end =s.nextInt();

**int** sum=0;

**int** n;

**if**(start<end){

n=end-start+1;

}**else**{

n=start-end+1;

}

**int** arr[]=**new** **int**[n];

**int** j=0;

**if**(start<end){

**for**(**int** i=start;i<=end;i++){

arr[j]=i;

j++;

}

}**else**{ **for**(**int** i=start;i>=end;i--){

arr[j]=i;

j++;

}

}

**for**(**int** i=0;i<n;i++){

sum=sum+arr[i];

}

System.***out***.println("Sum:"+sum);

}}