1. [**Scala program to print your name.**](https://www.includehelp.com/scala-programs/#p1)

object ExPrintName {

def main(args: **Array**[**String**]) {

println("My name is Mike!")

}

}

1. [**Scala program to find largest number among two numbers.**](https://www.includehelp.com/scala-programs/#p2)

object HelloWorld {

def main(args: Array[String]) {

var num1 = 20;

var num2 = 30;

if(num1>num2){

println("largest number is : "+num1);

}

else{

println("largest number is: "+num2);

}

}

}

1. [**Scala program to find a number is positive, negative or positive.**](https://www.includehelp.com/scala-programs/#p3)

object HelloWorld {

def main(args: Array[String]) {

var num1 = (-100);

if(num1>0){

println("The given number "+num1+" is positive");

}

else if(num1<0){

println("The given number "+num1+" is negative");

}

else{

println("number is zero");

}

}

}

1. [**Scala program to declare string variable and print the string.**](https://www.includehelp.com/scala-programs/#p4)

object HelloWorld {

def main(args: Array[String]) {

val text : String ="You are reading scala programming language";

println("value of the string is "+text)

}

}

1. [Scala program to demonstrate example of multiple variables declarations and assignments.](https://www.includehelp.com/scala-programs/#p5)

object HelloWorld {

def main(args: Array[String]) {

var (name : String, age : Int)= Pair("mike",21);

println("name : "+name);

println("age : "+age);

var (address,mobile) = Pair("New Delhi , India",123456789);

println("Address : "+address);

println("Mobile : "+mobile);

}

}

1. [**Scala program to print numbers from 1 to 100 using for loop.**](https://www.includehelp.com/scala-programs/#p6)

def main(args: Array[String]) {

var i: Int=0;

for(i<-1 to 100){

println(i);

}

}

}

1. [**Scala program to print numbers from 1 to 100 using for loop with until to determine loop range.**](https://www.includehelp.com/scala-programs/#p7)

object HelloWorld {

def main(args: Array[String]) {

var counter : Int=0;

for(counter<-0 until 101)

{

println(counter)

}

}

}

1. [**Scala program to demonstrate example of collection list and for loop.**](https://www.includehelp.com/scala-programs/#p8)

object HelloWorld {

def main(args: Array[String]) {

var N:Int=0;

var numbers=List(100,200,300,400);

for(N<-numbers){

println(N);

}

}

}

1. [**Scala program to create a user define function to return largest number among two numbers.**](https://www.includehelp.com/scala-programs/#p9)

object HelloWorld{

def getLargestNumber(x: Int,y: Int): Int={

var temp: Int=0;

if(x>y){

temp=x;

}

else

{

temp=y;

}

return temp;

}

def main(args: Array[String]) {

var a: Int=10;

var b: Int=20;

var n: Int=0;

n=getLargestNumber(a,b);

println("the larest number among the two is : "+n);

}

}

1. [**Scala program to**](https://www.includehelp.com/scala-programs/#p9) check if a number is even

object HelloWorld {

def main(args: Array[String]) {

var counter=0;

var n=15;

for(counter <-1 to n){

if(counter%2==0){

println(counter + " ")

}

}

}}

10. Scala program to check if a number is odd or even

object HelloWorld {

def main(args: Array[String]) {

var n=15;

if(n%2==0){

println("number is even ")

}

else{

println("number is odd")

}

}

}

1. [**Scala program of array - Declare, print and calculate sum of all elements.**](https://www.includehelp.com/scala-programs/#p10)

object HelloWorld{

def main(args: Array[String]) {

var numbers=Array(10,20,30,40,50);

var n: Int=0;

for(n<-numbers){

println(n);

}

var sum: Int=0;

for(n<-numbers){

sum+=n;

}

println("sum of all array elements : "+sum)

}

}

**12. Scala program to perform linear search**

/\* Online Scala Compiler \*/

object HelloWorld {

def main(args: Array[String]) {

var numbers= Array(10,20,30,40,50);

var i=0;

var element: Int=20;

for(i<-0 until numbers.length)

{

if(element==numbers(i))

{

println("number found");

return;

}

}

println("number not found");

}

}

1. [**Scala program to create a simple function**](https://www.includehelp.com/scala/create-a-simple-function.aspx)

object HelloWorld{

def main(args: Array[String]) {

simpleFun();

}

def simpleFun(){

println("hello");

}

}

1. [**Scala program to create a function with arguments**](https://www.includehelp.com/scala/create-a-function-with-arguments.aspx)

object HelloWorld{

def main(args: Array[String]) {

println(addnum(5,6));

}

def addnum(x:Int,y:Int): Int={

var sum: Int=0;

sum=x+y;

return sum;

}

}

1. [**Scala program to return a value from a function using the 'return' statement**](https://www.includehelp.com/scala/return-a-value-from-a-function-using-the-return-statement.aspx)

object HelloWorld{

def main(args: Array[String]){

println(addnum(5,6));

}

def addnum(x:Int,y:Int): Int={

var sum: Int=0;

sum=x+y;

sum;

}

}

1. [**Scala program to return a value from the function without using the 'return' statement**](https://www.includehelp.com/scala/return-a-value-from-the-function-without-using-the-return-statement.aspx)

object HelloWorld{

def main(args: Array[String]) {

println(addnum(5,6));

}

def addnum(x:Int,y:Int): Int={

var sum: Int=0;

sum=x+y;

sum;

}

}

1. [**Scala program to create a function with default arguments**](https://www.includehelp.com/scala/create-a-function-with-default-arguments.aspx)

object HelloWorld{

def main(args: Array[String]) {

println(addnum(5,6));

println(addnum(5));

println(addnum());

}

def addnum(num1:Int = 10,num2:Int=30): Int={

var result : Int=0;

result = num1+num2;

result;

}

}

1. [**Scala program to call a function with named parameters**](https://www.includehelp.com/scala/call-a-function-with-named-parameters.aspx)

object HelloWorld{

def main(args: Array[String]) {

println(addnum(5,6));

println(addnum(5,5));

}

def addnum(num1:Int,num2:Int): Int={

var result : Int=0;

result = num1+num2;

result;

}

}

1. **TO PASS ARRAY AS ARGUMENT TO A FUNCTION**

object HelloWorld{

def main(args: Array[String]) {

var arr= Array(1,2,3,4,5,6);

printArray(arr);

}

def printArray(arr:Array[Int]){

var i: Int=0;

println("elements of the array are : ");

while(i<arr.length){

printf("%d \n",arr(i));

i=i+1;

}

}

}

**q. scala program to double elements in an array**

object HelloWorld {

def main(args: Array[String]) {

val a=Array(2,3,5,7,11);

var i:Int=0;

while(i<a.length)

{

println(a(i)\*2);

i=i+1;

}

}

}

**q. scala program to print only positive elements in an array**

1. [**Scala program to print numbers from 1 to 10 using while, do-while, and for loop**](https://www.includehelp.com/scala/print-numbers-from-1-to-10-using-while-do-while-and-for-loop.aspx)

object HelloWorld{

def main(args: Array[String]) {

var count:Int =0;

while(count<10){

printf("%d\n",count);

count=count+1;

}

do{

printf("%d\n",count);

count=count+1;

}while(count<=10);

}

}

1. [**Scala program to implement infinite loop using while and do-while loop**](https://www.includehelp.com/scala/implement-infinite-loop-using-while-and-do-while-loop.aspx)

object HelloWorld{

def main(args: Array[String]) {

do{

println("hello")

}while(true);

}

}

**LOOPS**

object HelloWorld{

def main(args: Array[String]) {

var i: Int=0;

var j:Int =0;

for(i<-1 to 3; j<-1 to 3){

print(f"${10\*i+j} \n");

}

}

}

O/p

11

12

13

21

22

23

31

32

33

object HelloWorld{

def main(args: Array[String]) {

var i: Int=0;

var j:Int =0;

for(i<-1 to 3; j<-1 to 3 if i!=j){

print(f"${10\*i+j} \n");

}

}

}

12

13

21

23

31

32

object HelloWorld{

def main(args: Array[String]) {

var i: Int=0;

var j:Int =0;

var from=0;

for(i<-1 to 3; from=4-i;j<-from to 3 ){

print(f"${10\*i+j} \n");

}

}

}

13

22

23

31

32

33

**Variable number of arguments**

object HelloWorld{

def main(args: Array[String]) {

println(sum(1,2,3,4,5));

}

def sum(args:Int\*)={

var result=0;

for(arg<-args)result+=arg;

result;

}

}

O/p 15

**REVERSE LOOP**

object HelloWorld{

def main(args: Array[String]) {

for(i<-10 to 0 reverse){

println(i)

}

}

}

**OR**

object HelloWorld{

def main(args: Array[String]) {

for(i<-10 to 0 by -1){

println(i);

}

}

}

**Q. program to print BMSCE using function call**

/\* Online Scala Compiler \*/

object HelloWorld {

def box(s : String) {

val border = "-" \* (s.length + 2)

print(f"$border%n|$s|%n$border%n")

}

def main(args: Array[String]) {

box("BMSCE");

}

}

**q. scala program to perform operations on on string using for loop**

object HelloWorld {

def main(args: Array[String]) {

for (c <- "Hello"; i <- 0 to 1) {

print((c + i).toChar);

}

}

}

object HelloWorld {

def main(args: Array[String]) {

for (i <- 0 to 1; c <- "Hello"){

print((c + i).toChar);

}

}

}

**q. scala program to print alternate element in array**

object HelloWorld {

def main(args: Array[String]) {

var b= Array(1,2,3,4,5,6,7,8);

var i : Int=0;

for(i<-0 until b.length by 2) {

println(b(i));

}

}

}

Not right

import scala.collection.mutable.ArrayBuffer;

object HelloWorld {

def main(args: Array[String]) {

val a=Array(-2,-3,5,7,11);

var i:Int=0;

val pos=for(i<-a.indices if a(i)<0)yield i;

for(i<-pos.reverse)a.remove(i);

while(i<a.length)

{

println(a(i));

}

}

}

**1. Program to run wordcount on scala shell**

Note- Create a textfile sparkdata.txt locally and give appropriate path while loading the

data using sc.textFile

val data=sc.textFile("sparkdata.txt")

data.collect;

val splitdata = data.flatMap(line => line.split(" "));

splitdata.collect;

val mapdata = splitdata.map(word => (word,1));

mapdata.collect;

val reducedata = mapdata.reduceByKey(\_+\_);

reducedata.collect;

**2. Using RDD and FlaMap count how many times each word appears in**

**a file and write out a list of words whose count is strictly greater than**

4 using Spark.

val textFile = sc.textFile("/home/bhoom/Desktop/wc.txt")

val counts = textFile.flatMap(line => line.split(" ")).map(word => (word, 1)).reduceByKey(\_ + \_)

import scala.collection.immutable.ListMap

val sorted=ListMap(counts.collect.sortWith(\_.\_2 > \_.\_2):\_\*)// sort in descending order based

on values

println(sorted)

for((k,v)<-sorted)

{

if(v>4)

{

print(k+",")

print(v)

println()

}

}