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| **BCA Semester-VI**  **Assignment-1**  **Basic Kotlin Programs** | |
| 1. | Write a program to display “Hello World” message.  fun main() {  println("hello word");  } |
| 2. | Write a program to display your full name, address and mobile number.  fun main() {  println("name")  println("address")  println("number")  } |
| 3. | Write a program to demonstrate the use of var and val keywords of Kotlin.  fun main() {  var a=10  val b=30  println("value of a=$a")  println("value of b=$b")  } |
| 4. | Write a program to take to declare two integer types of variables and display sum of them.  fun main() {  var a=10  val b=30  var c=a+b  println("sum of a+b=$c")  } |
| 5. | Write a program to demonstrate the use of string interpolation.  fun main() {  var a=10  val b=30  println("sum of $a + $b is: ${a+b}")  } |
| 6. | Write a program to demonstrate the usage of arithmetic operators.  fun main() {  var a=10  val b=30  var sum=a+b  var sub=a-b  varmul=a\*b  var div=a/b  println("sum of a+b=$sum")  println("sub of a-b=$sub")  println("mul of a\*b=$mul")  println("div of a/b=$div")  } |
| 7. | Write a program to demonstrate relational operators.  fun main() {  var a=10  val b=30  println(a>b)  println(a>b)  println(a==b)  println(a!=b)  } |
| 8. | Write a program to demonstrate logical operators.  fun main() {  vartestmarks:Int=70  varknowsprogramming=true  varhireforjob= (testmarks>=70) &&knowsprogramming  if(hireforjob==true)  {  println("pass")  }  else  {  println("fail")  }  } |
| 9. | Write a program to take one integer variable and check weather value of variable fall under specified range or not. (use .. and until operators)  fun main() {  println("Enter a Number: ")  var a:Int = readLine().toInt()  if(a in 1..10)  {  println("Value Fall into Range (In)...")  }  else  {  println("Value Not Fall into Range (In)...")  }    if(a in 1 untill 10)  {  println("Value Fall into Range (Untill)...")  }  else  {  println("Value Not Fall into Range (Untill)...")  }  } |
| 10. | Write a program to take simple string from user and display the string entered by user in console.  fun main() {  println("Enter a Number: ")  // var a:Int = readLine().toInt()  var a:Int = 10;  if(a in 1..10)  {  println("Value Fall into Range (In)...")  }  else  {  println("Value Not Fall into Range (In)...")  }    if(a in 1 until 10)  {  println("Value Fall into Range (Untill)...")  }  else  {  println("Value Not Fall into Range (Untill)...")  }  } |
| 11. | Write a program to read integer inputs from user using Scanner class, perform some arithmetic operation on it and display the output to the console.  import java.util.Scanner  fun main() {  val scan : Scanner = Scanner (System.`in`)  // println("Enter First Number: ")  // var a:Int = scan.nextInt()  // println("Enter Second Number: ")  // var b:Int = scan.nextInt()  var a=10; var b=5;  println("Addition, Subtracion, Multiplication and Division of $a and $b is Respectively ${a+b}, ${a-b}, ${a\*b}, ${a/b}")  } |
| 12. | Write a program to demonstrate the usage of type conversion function available in Kotlin.  import java.util.Scanner  fun main() {    // println("Enter a Number: ")  // var a:Int = readLine().toInt()  // String to Integer  var a = "10"  var n = 0  n = a.toInt()  println("String to Integer: "+n)  var c: Double = 41.5;  var f = c.toFloat()  println("Double to Float: "+f)  var d = (f.toDouble()+1.25555)  println("Float to Double: "+d)  } |
| 13. | Write a program to find the area of a circle.  fun main() {    // println("Enter Radius: ")  //var radius:Double = readLine().toDouble()  var radius:Double = 10.0;  var PI = 3.14;  println("Area of Circle is: ${PI\*radius\*radius}");  } |
| 14. | Write a program to find the area of a triangle.  fun main() {    // println("Enter Height: ")  //var h:Double = readLine().toDouble()  //// println("Enter Base: ")  //var b:Double = readLine().toDouble()  var h:Double = 10.0;  var b:Double = 20.0;  println("Area of Triangle is: ${0.5 \* h \* b}");  } |
| 15. | Write a program to find the percentage of 5 subjects.  fun main() {    // println("Enter Subject 1 Marks: ")  //var m1:Int = readLine().toInt()  // println("Enter Subject 2 Marks: ")  //var m2:Int = readLine().toInt()  //// println("Enter Subject 3 Marks: ")  //var m3:Int = readLine().toInt()  //// println("Enter Subject 4 Marks: ")  //var m4:Int = readLine().toInt()  //// println("Enter Subject 5 Marks: ")  //var m5:Int = readLine().toInt()  var m1:Int = 67  var m2:Int = 98  var m3:Int = 75  var m4:Int = 47  var m5:Int = 81  var total = m1+m2+m3+m4+m5  var percentage: Double = (total/5.0)  println("Marks of Subject 1: ${m1}")  println("Marks of Subject 2: ${m2}")  println("Marks of Subject 3: ${m3}")  println("Marks of Subject 4: ${m4}")  println("Marks of Subject 5: ${m5}")    println("\nTotal is: $total \nPercentage is: $percentage");  } |
| 16. | Write a program to find greatest number of two numbers.  fun main() {    // println("Enter Number 1: ")  //var n1:Int = readLine().toInt()  // println("Enter Number 2: ")  //var n2:Int = readLine().toInt()  var n1:Int = 67  var n2:Int = 98  if(n1>n2)  println("Greater Number Between $n1 and $n2 is: $n1.")  else if(n1<n2)  println("Greater Number Between $n1 and $n2 is: $n2.")  else  println("Both The Numbers Are Equal.")  } |
| 17. | Write a program to find greatest number of three numbers.  fun main() {    // println("Enter Number 1: ")  //var n1:Int = readLine().toInt()  // println("Enter Number 2: ")  //var n2:Int = readLine().toInt()  // println("Enter Number 3: ")  //var n3:Int = readLine().toInt()  var n1:Int = 67  var n2:Int = 980  var n3:Int = 890  if(n1>n2 && n1>n3)  println("Greater Number Between $n1, $n2 and $n3 is: $n1.")  else if(n2>n3)  println("Greater Number Between $n1, $n2 and $n3 is: $n2.")  else  println("Greater Number Between $n1, $n2 and $n3 is: $n3.")  } |
| 18. | Write a program to check whether entered number is even or odd.  fun main() {    // println("Enter Number for Check: ")  //var n1:Int = readLine().toInt()  var n1:Int = 3  if(n1%2!=0)  println("Number is ODD.")  else  println("Number is Even")  } |
| 19. | Write a program to check whether year entered by the user is leap year or not.  fun main() {    // println("Enter Year: ")  //var year:Int = readLine().toInt()  var year:Int = 2021  if((year%4==0) && ((year%100!=0) || (year%400==0)))  println("Year is Leap Year")  else  println("Year is Not a Leap Year")  } |
| 20. | Write a program to check whether number entered by user is 100, less than 100 or greater than 100.  fun main() {    // println("Enter Number: ")  //var number:Int = readLine().toInt()  var number:Int = 100  if(number>100)  println("Number is Greater than 100.")  else if(number<100)  println("NUmber is Less than 100.")  else  println("Number is 100.")  } |
| 21. | Check whether a number is negative, positive or zero.  fun main() {    // println("Enter Number: ")  //var number:Int = readLine().toInt()  var number:Int = -10  if(number>0)  println("Number is Positive.")  else if(number<0)  println("NUmber is Negative.")  else  println("Number is Zero.")  } |
| 22. | Write a program to print 1 to 10 number using while loop. |
| 23. | Write a program to print 1 to 10 number using for loop. |
| 24. | Write a program to print even numbers between 1 to 10 using for loop. |
| 25. | Write a program to print off numbers between 1to 10 using for loop. |
| 26. | Write a program to print table of a number entered by user using for loop. |
| 27. | Write a program to check whether entered number by user is prime or not. |
| 28. | Display Fibonacci Series Using for loop. |
| 29. | Check Number Is Armstrong Or Not using While Loop. |
| 30. | Reverse the number using while loop. |