

# National University of Computer and Emerging Sciences, Lahore Campus



Course: **BIGDATA**  
Program: **MS(CS)**  
Duration: **15 Minutes**  
Paper Date: **15-3-2018**

Course Code: **CS**  
Semester: **Spring 2018**  
Total Marks:

NAME:  
ROLLNO:

Exam: **Quiz 3**

Instruction/Notes: Solve the exam in the space provided.

## Question 1: What will be the output of the following code

```
val rdd1 = sc.parallelize(Seq((1,"jan",2016),(3,"nov",2014),(16,"feb",2014)))
val rdd2 = sc.parallelize(Seq((16,"dec",2011),(16,"feb",2014)))
val rddUnion = rdd1.union(rdd2)
rddUnion.foreach(println)
val rdd3 = rddUnion.map(x => x._2).distinct()
rdd3.foreach(print)
```

Output

Explain the Lineage graph of above code will have narrow or wide dependency

## Question 2: What will be the output of the following code

```
val words =
Array("one","two","two","four","five","six","six","eight","nine","ten")
val rdd = sc.parallelize(words)
val rdd1 = rdd.map(w=> (w.length(),1))
rdd1.foreach(println)
val rdd2 = rdd1.reduceByKey((x,y) => x+y)
rdd2.foreach(println)
```

Output

Explain the Lineage graph of the above code will have narrow or wide dependency