* In your **own words**, explain the following:
  + Singly-linked list- I can say that a linked list consists of nodes that have data on them. A singly or simple linked list is a type of linked list that is one way only from top to bottom (head to tail).
  + UNIX vs. Linux- basically UNIX is proprietary and Linux is open source and under GNU. UNIX is also an overall package of OS compared to Linux which is just a kernel itself, that’s why it’s common for users to edit the kernel. Moreover, I know that Linux is a clone of UNIX so most commands are similar. Examples of UNIX are Solaris, macOS while for Linux are RHEL, centos.
  + 192.168.0.0/24 – it is a class C network address and the /24 is the subnet mask 255.255.255.0. It ranges from 192.168.0.0 and 192.168.0.255 with 254 possible hosts( 2^(32-24))-2)
  + Encryption- encryption is the process of converting information to a secured version since the old methods used plain text and were easy to be hacked. In my own opinion, I remember that there is data in transit and rest encryption. Data in transit is encrypting the data while it’s moving using SSL/TSL or any other encryption method. Data at rest encryption uses keys/AES methods to protect data.
* With the following code, answer the following:
  + What will be the output? – Basically this script will run until it satisfies all the if conditions and “continue” is used here for the next iteration of the loop. The output would be 315 because it passed all the conditions 315%5, 315%7, 315%9 with output equal to zero. The loop will then break and output $nr which is 315.
  + If you remove line #26, what will be the output?- By removing line 26 break, the script will continue to execute until the loop is finished, that is until nr=10000. After the loop is finished, it will output the last number $nr which is 10000.

1 #!/bin/bash

2

3 MAX=10000

4

5 for((nr=1; nr<$MAX; nr++))

6 do

7

8 let "t1 = nr % 5"

9 if [ "$t1" -ne 0 ]

10 then

11 continue

12 fi

13

14 let "t2 = nr % 7"

15 if [ "$t2" -ne 0 ]

16 then

17 continue

18 fi

19

20 let "t3 = nr % 9"

21 if [ "$t3" -ne 0 ]

22 then

23 continue

24 fi

25

26 break

27

28 done

29

30 echo "Number = $nr"

31

32 exit 0