Script problems 2

Generate squares of 1 to 30 in a squares.txt file in the below pattern
1=1,2=4,3=9,....,28=784,29=841,30=900
read the squares.txt file to generate squares.formatted file in the below pattern
Square of 1 is 1
...
Square of 30 is 900

```
#!/bin/bash
echo "Generating 1 to 30 squares and storing in a txt file"
SQUARES="1=1"
for((i=2;i<=30;++i))
do
        SQUARES+=",${i}=$((i*i))"
done
echo "$SQUARES" > "squares.txt"

if [[ ${?} -eq 0 ]]
then
        echo "File named squares.txt generated successfully"
else
        echo "File named squares.txt is not generated successfully"
        echo "Generation failed with exit code ${?}"
        exit ${?}
fi

READ_FROM_FILE=$(cat squares.txt)
IFS=','
SQS=($READ_FROM_FILE)
IFS='='
for SQ in "${SQS[@]}"
do
        TEMP=($SQ)
        echo "Square of ${TEMP[0]} is ${TEMP[1]}"
done
exit "0"
```
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Before running the script, No squares.txt file is present in Scripts folder

franklinedward@Franklins-MacBook-Pro-2 Scripts % ls
Script Outputs - 1.pdf   fiboacci.sh   script test case
evidence.pdf
create_and_read_square.sh   palindrome.sh   word_count.sh
different_files   prime.sh

Output

franklinedward@Franklins-MacBook-Pro-2 Scripts % ./create_and_read_square.sh

Generating 1 to 30 squares and storing in a txt file
File named squares.txt generated successfully
Squares from 1 to 30 read from squares.txt
Square of 1 is 1
Square of 2 is 4
Square of 3 is 9
Square of 4 is 16
Square of 5 is 25
Square of 6 is 36
Square of 7 is 49
Square of 8 is 64
Square of 9 is 81
Square of 10 is 100
Square of 11 is 121
Square of 12 is 144
Square of 13 is 169
Square of 14 is 196
Square of 15 is 225
Square of 16 is 256
Square of 17 is 289
Square of 18 is 324
Square of 19 is 361
Square of 20 is 400
Square of 21 is 441
Square of 22 is 484
Square of 23 is 529
Square of 24 is 576
Square of 25 is 625
Square of 26 is 676
Square of 27 is 729
Square of 28 is 784
Square of 29 is 841
Square of 30 is 900
franklinedward@Franklins-MacBook-Pro-2 Scripts % ls
Script Outputs - 1.pdf   fiboacci.sh   script test case
evidence.pdf
create_and_read_square.sh   palindrome.sh   *squares.txt*
different_files   prime.sh   word_count.sh
franklinedward@Franklins-MacBook-Pro-2 Scripts %

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Write a shell script which reads filename as argument & prints below outputs
  • **Top 3 repeating words from the file with its counts**
  • **Top 3 longest lines length has to be printed**

```bash
#!/bin/bash
while :
do
        read -p "Enter the file_name to get top 3 repeatative words and 3 longest line "
FILE

        if [[ -f "$FILE" ]]
        then
                FILE_CONTENT=$(cat $FILE)
                break;
        else
                echo "File doesn't exists on the given path"
        fi
done

echo "Top 3 repeatative words are"
cat $FILE | tr '[:upper:]' '[:lower:]' | sed 's/[^[:alpha:][:space:]]//g' | tr ' ' '\n' | sort | uniq -c |
sort -nr | head -3

echo "Top 3 longest Lines"
cat $FILE | awk '{ print length, $0 }' | sort -nr | head -3
```
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For the longest line, the code consider the length of the line till we press enter. It doesn't
consider "." Is where the line ends..
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NO1:
Input: /different_files/file1.txt
Output:
Top 3 repeatative words are
  16 the
  12 and
   8 a
Top 3 longest Lines
139 From that day on, the Smiths made sure to always keep a closer eye on the
dogs, but they wouldn't trade the love and laughter for anything.
132 John and Jane looked at each other and smiled, grateful for the love and
laughter of their family, including their furry companions.
113 The mother, Jane, was a stay-at-home mom who took care of their two children,
Jack and Jill, and their five dogs.

NO2:
Input:. /different_files/file2.txt
Output:
Top 3 repeatative words are
  14 and

12 the
    9 they
Top 3 longest Lines
142 The family was sad to see him go, but they knew they would always be connected through their love for each other and their three beloved dogs.
136 Michael couldn't believe how much they had grown, Bella, Max and Rocky showered him with love and licks, which Michael happily returned.
123 They also had three dogs, a Golden Retriever named Bella, a Labrador Retriever named Max and a German Shepherd named Rocky.

NO3:
Input: ./different_files/file3.txt
Output:
Top 3 repeatative words are
   13 and
   12 they
   12 a
Top 3 longest Lines
123 They were grateful for the love and companionship he provided, and they knew that he was meant to be a part of their lives.
109 They were glad to have given a home to a lost puppy and Max was glad to have found a home with loving family.
95 Alex and Samantha knew that they had to help, so they brought the puppy home and cleaned it up.

NO4:
Input1: ./different_files/file4.txt
Input2: ./different_files/files4.txt
Output:
Enter the file_name to get top 3 repeatative words and 3 longest line ./ different_files/file4.txt
File doesn't exists on the given path
Enter the file_name to get top 3 repeatative words and 3 longest line ./ different_files/files4.txt
Top 3 repeatative words are
   12 they
    7 was
    7 and
Top 3 longest Lines
137 They knew their life would never be the same, but they couldn't wait for all the adventures that lay ahead for them as a family of three.
84 They were overjoyed as they held their newborn son in their arms for the first time.
76 They couldn't believe how much love they had for their little bundle of joy.
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