**Ahmed Hassan Ismail – BESE-9B – 237897**

**OS Lab 2 tasks:**

**Task1:**

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| **Code:**  echo "Enter a Number"  read n  i=0  while [ $i -le 10 ]  do  echo " $n x $i = `expr $n \\* $i`"  i=`expr $i + 1`  done  **Screenshot:** |

**Task2:**

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| **Code:**  # !/bin/bash  # Take user Input  echo "Enter Two numbers : "  read a  read b  # Input type of operation  echo "Enter Choice :"  echo "1. Addition"  echo "2. Subtraction"  echo "3. Multiplication"  echo "4. Division"  read ch  # Switch Case to perform  # calulator operations  case $ch in  1)res=`echo $a + $b | bc`;;  2)res=`echo $a - $b | bc`;;  3)res=`echo $a \\* $b | bc`;;  4)res=`echo "scale=2; $a / $b" | bc`;;  esac  echo "Result : $res"  **Screenshot:** |

**Task3:**

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| **Code:**  #removing tags  x=$(sed -i 's/<[^>]\+>//g' file1.txt);    #removing acronyms  y=$(sed -i 's/NUST/National University of Science and Technology/g' file1.txt)  z=$(sed -i 's/SEECS/School of Electrical Engineering and Computer Science/g' file1.txt)    #alog for converting num to words  num\_to\_words()  {  n=$1  len=$(echo $n | wc -c)  len=$(( $len - 1 ))    new="";  for (( i=1; i<=$len; i++ ))  do  digit=$(echo $n | cut -c $i)  if [[ $i -eq $((len-1)) ]]; then  case $digit in  0) new=$new" " ;;  1) new=$new"ten " ;;  2) new=$new"twenty " ;;  3) new=$new"thirty " ;;  4) new=$new"forty " ;;  5) new=$new"fifty " ;;  6) new=$new"sixty " ;;  7) new=$new"seventy " ;;  8) new=$new"eighty " ;;  9) new=$new"ninety " ;;  esac    elif [[ $i -ne $((len-1)) ]]; then  case $digit in  0) new=$new"zero " ;;  1) new=$new"one " ;;  2) new=$new"two " ;;  3) new=$new"three " ;;  4) new=$new"four " ;;  5) new=$new"five " ;;  6) new=$new"six " ;;  7) new=$new"seven " ;;  8) new=$new"eight " ;;  9) new=$new"nine " ;;  esac    fi    if [[ $i -eq $((len-2)) ]]; then  new=$new"hundred and ";  elif [[ $i -eq $((len-3)) ]]; then  new=$new"thousand ";  fi  done  echo $new;    }    #conversion in file from num to words  string=$(num\_to\_words 9123);  abc=$(sed -i 's/9,123/'"$string"'/g' file1.txt);    string2=$(num\_to\_words 2134);  xyz=$(sed -i 's/2134/'"$string2"'/g' file1.txt);    #uppercase to lowercase  sed -i 's/\([A-Z]\)/\L\1/g' file1.txt;  **Screenshot:** |