Coos ASSIGNMENT

1. VowelsORconsonants

**echo "Enter a character: "**

**read char**

**char=$(echo "$char" | tr '[:upper:]' '[:lower:]')**

**case $char in**

**a|e|i|o|u)**

**echo "$char is a vowel."**

**;;**

**[b-df-hj-np-tv-z])**

**echo "$char is a consonant."**

**;;**

**\*)**

**echo "Invalid input. Please enter a single alphabetic character."**

**;;**

**esac**

1. **Salary Calculator**

echo "Enter the gross salary:"

read gross\_salary

echo "Enter the Allowances: "

read allowances

echo "Enter the total deductions: "

read deduction

#Cal the Bsic Salary

basic\_salary=$((gross\_salary - allowances + decuction))

echo "The Basic Salary is : $basic\_salary"

1. digits in Number

echo "Enter a number: "

read num

len=${#num}

case $len in

1)

echo "$num is a single-digit number."

;;

2)

echo "$num is a two-digit number."

;;

3)

echo "$num is a three-digit number."

;;

\*)

echo "$num has more than three-digits."

;;

esac

1. Swap the numbers

echo "Enter the first number: "

read num1

echo "Enter the second number: "

read num2

echo "Before swapping: num1 = $num1, num2 = $num2"

temp=$num1

num1=$num2

num2=$temp

echo "After swapping: num1 = $num1, num2 = $num2"

1. Arthmetic opertions and comparison

echo "Enter the first number: "

read a

echo "Enter the second number: "

read b

addition=$((a + b))

subtraction=$((a - b))

multiplication=$((a \* b))

division=$((a / b))

modulus=$((a % b))

echo "Addition: $a + $b = $addition"

echo "Subtraction: $a - $b = $subtraction"

echo "Multiplication: $a \* $b = $multiplication"

echo "Division: $a / $b = $division"

echo "Modulus: $a % $b = $modulus"

if [ $a -gt $b ]; then

echo "$a is greater than $b"

elif [ $a -lt $b ]; then

echo "$a is less than $b"

else

echo "$a is equal to $b"

fi

1. ass3 file managnment/(don’t know??)

# 1. Create a new file. Filename should be taken from the user.

echo "Enter the filename to create:"

read filename

touch $filename

echo "File '$filename' created successfully."

# 2. Give message for successful file creation to user.

echo "The file '$filename' has been created."

# 3. Ask user to enter content into the file.

echo "Enter content to add to the file:"

read content

echo $content > $filename

echo "Content added to the file."

# 4. Display the content of newly created file and word count.

echo "Content of the file:"

cat $filename

word\_count=$(wc -w < $filename)

echo "Word count: $word\_count"

# 5. Display the content of the file in sorted manner.

echo "Sorted content of the file:"

sort $filename

# 6. Display the content in uppercase.

echo "Content in uppercase:"

cat $filename | tr '[:lower:]' '[:upper:]'

# 7. Display first 'n' lines of a file. This 'n' should be given by user.

echo "Enter the number of lines to display:"

read n

echo "First $n lines of the file:"

head -n $n $filename

# 8. Perform a keyword-based search on the file. Keyword should be given by user.

echo "Enter a keyword to search in the file:"

read keyword

grep -i $keyword $filename

# 9. Rename an existing file.

echo "Enter a new name for the file:"

read new\_filename

mv $filename $new\_filename

echo "File renamed to '$new\_filename'."

# 10. Perform cut operations on the file. Ask the user to enter the cut position.

echo "Enter the cut position (column numbers separated by commas, e.g., 1,2,3):"

read cut\_positions

echo "content after cut operation: "

cut -d ' ' -f$cut\_positions $filename

# 11. Ask the user to enter the file name and delete that file.

echo "Enter the filename to delete: "

read delete\_filename

rm $delete\_filename

echo "File '$delete\_filename' has been deleted. "

* ASSIGNMENT NO – 9

1. Shell script using for loop to print the pattern:

echo "Enter the value of n: "

read n

# Printing increasing part of pattern

for (( i=1; i<=n; i++ ))

do

for (( j=1; j<=i; j++ ))

do

echo -n "\*"

done

echo

done

# Printing decreasing part of pattern

for (( i=n-1; i>=1; i-- ))

do

for (( j=1; j<=i; j++ ))

do

echo -n "\*"

done

echo

done

1. Shell script using for loop to display a chessboard on screen.

for (( i=1; i<=8; i++ ))

do

for (( j=1; j<=8; j++ ))

do

if (( (i + j) % 2 == 0 )); then

echo -e -n "\033[47m "

else

echo -e -n "\033[40m "

fi

done

echo -e "\033[0m"

done

1. Write a shell script using for loop which considers Day 1 as Mon (weekday) and accordingly considers Day 7 as Sun (weekend) and print the wage as Rs 350 for weekday and Rs 550 for weekend.

weekday\_wage=350

weekend\_wage=550

days=("Mon" "Tue" "Wed" "Thu" "Fri" "Sat" "Sun")

for (( i=0; i<7; i++ ))

do

day=${days[$i]}

day\_num=$((i + 1))

# Check if it's a weekend (Sat or Sun)

if [[ "$day" == "Sat" || "$day" == "Sun" ]]; then

echo "Day $day\_num: $day (weekend), wage = $weekend\_wage"

else

echo "Day $day\_num: $day (weekday), wage = $weekday\_wage"

fi

done

1. Shell script to print the factorial of a number using for loop

echo "Enter a number: "

read num

factorial=1

for (( i=1; i<=num; i++ ))

do

factorial=$((factorial \* i))

done

echo "Factorial of $num is $factorial"