SHELL PROGRAM - 2

1.Write a shell script to ask your name, program name and enrollment number and print it on the screen.

Code:

```
read -p 'Enter you name: ' name

read -p 'Enter the program name: ' pName

read -p 'Enter the enrollment number: ' enNum

echo -e "\nDetails\n_________"

echo -e "Name: $name\nProgram name: $pName\nEnrollment number: $enNum"
```

2.Write a shell script to find the sum, the average and the product of the four integers entered.

Code:

```
read -p "Enter Four integer numbers: " a b c d

echo "Sum of entered numbers:$((a+b+c+d))"

echo "Avarage of entered numbers:`echo "scale=2; (( $a + $b + $c + $d ) / 4 )" | bc`"

echo "Product of entered numbers: $((a*b*c*d))"
```

3. Write a shell program to exchange the values of two variables.

Code:

```
a=$1
b=$2
echo "Before Exchanging : a= $a and b=$b"
a=$((a+b))
b=$((a-b))
a=$((a-b))
echo "After Exchanging : a= $a and b=$b
```

4. Write a shell script to display the digits which are in odd position in a given 5 digit number.

Code:

```
num=$1
newNum=0
for (( i=1,j=1;i<=5;i++ ))
do
    digit=$((num%10))
    if [[ $((i%2)) != 0 ]]
    then
        newNum=$(((newNum)+(digit*j)))
```

```
        j=$((j*10))
    fi
    num=$((num/10))
done
echo "Number after removing even position of given number: $newNum"
```

5. Write a shell script to find the largest among the 3 given numbers.

Code :

```
if [[ $1 > $2 ]] && [[ $1 > $3 ]]; then
    echo "largest number: $1"
elif [[ $2 > $1 ]] && [[ $2 > $3 ]]; then
    echo "largest number: $2"
else
    echo "largest number: $3"
fi
```

6. Write a shell program to concatenate two strings and find the length of the resultant string.

Code:

```
str=$1$2
echo "Length of concatenated string ${str} is: ${#str}"
```

7. Write a shell program to check whether a given string is palindrome or not.

Code:

```
str=$1
len=${#str}
flag=0
for ((i=0;i<len/2;i++))
do
    l=$(((len-i)-1))
    if [[ ${str:i:1} != ${str:l:1} ]]
    then
        flag=1
        break
    fi
done
[ $flag == 0 ] && echo "Given string is a palindrome" || echo "Given string is not a palindrome"
```

8. Write a shell script to find the smallest of three numbers.

Code:

```
if [[ $1 < $2 ]] && [[ $1 < $3 ]]; then
        echo "Smallest number: $1"
elif [[ $2 < $1 ]] && [[ $2 < $3 ]]; then
        echo "Smallest number: $2"
else
        echo "Smallest number: $3"
fi
```