1) write a shell Script to find the factorial value of any integer enteaed through the keyboard.

⇒ echo " Enter a number "
read num
fact = 1
while [$ num -gt 1]
do
    fact = $((fact & num))
    num = $((num -1))
done
echo $ fact

2. Write a shell Script to generate all combinations of 1,2 and 3.

⇒ # SS26
shell Script to generate all combinations of
   123
wage ! SS26
Clear
for i in 123
do
for j in 123
do
for k in 123
do
echo $i $j $K
done
done
done

4 write a shell script to calculate the sum of digits of any number entered through keyboard.

⇒ echo "Enter a number"
read num
Sum = 0
while ($num -gt 0]
do
      mod = $((num % 10))
      Sum = $((sum + mod))
      num = $((num / 10))
done
echo $sum

5) Rajesh's basic Salary (BASIC) is input through
the Keyboard. His dearness allowence (DA) is 52%
of BASIC. House Sent allowence (HRA) is 15%
of BASIC Contributory provident fund is 12% of
(BASIC POA). write a shell script to calculate his
gross Salary and take home Salary using the follow
formula,   Gross Salaruy = BASIC + DA + HRA
          Take home Salary = Gross salary - (BASIC
                                                      + DAA)

→ echo " Please Enter Basic Salary ".
read basic
ehco "Please enter foir HRA".
read HRA.
echo " please enter tour PA "
read OA
DA echo = "Scale = 3, $basic ⨯ 0.52 " | bc

```
HRA echo = " Scale = 3, $ basic * 0.15 " | bc
CPF   echo = " Scale = 3, $ basic * 0.12 " | bc
echo " DA is ; $ DA ",
echo " HRA is :  $ HRA "
echo " CPF is :  $ CPF "
NS = echo " Scale = 3 : $ basic + $ DA + $ HRA + $ CPF
                    t : bc
echo " Net Salary : $ NS ".
```

5) output

Enter Basic Salary : 50,000

DA : 26000

HRA : 7500

Gross Salary : 50000 + 26000 + 7500

= 83500

home Salary = 83,800 - (50000 + 26000) × 0.12

= 83500 - 9120

= 74,380

4)   Enter a number

720

Sum of digit = 9

2) output.
   $ enter m and n.
   $ 8 10
   $ 3
   $ 5
   $ 7

1) output,
   Enter the number
      5
   ⇒ 120