

SEQUENCES:

1.#!/bin/bash -x

```
x=$(( RANDOM % 10))  
echo $x
```

2.#!/bin/bash -x

```
x=$(( RANDOM % 6 + 1))  
echo $x
```

3.#!/bin/bash -x

```
dice1=$(( RANDOM % 6 + 1))  
echo $dice1
```

```
dice2=$(( RANDOM % 6 + 1))  
echo $dice2
```

```
sum=$(( $dice1 + $dice2))  
Echo "sum of two random dice:$sum"
```

4.#!/bin/bash -x

```
echo "enter number(N)"  
read N  
sum=0
```

```
for((i=1;i<N;i++))  
do  
num=$(( ( RANDOM % 89) + 10))  
echo $num  
sum=$(( sum +num))  
done  
echo "sum of 5 random numbers:$sum"
```

```
avg=$(( $sum/$N))  
echo "average of the 5 random numbers:$avg"
```

5.#!/bin/bash-x

```
echo "1ft=12 inch then 42inch="$(42/12))  
echo "area of rectangular plot 60 feet*40 feet in meter"  
area=$((60*40))  
echo $area  
areameter=$((($area)/3))
```

```
echo$areameter
echo"area of such 24 plot in meter"
areameter=$((( $areameter)*24))
acre=$((( $areameter)/4047))
Echo "area in acre of 24 plot"$acre
```

```
6.#!/bin/bash -x
```

```
num1=$(((RANDOM %899) + 100))
echo $num1
```

```
num2=$(((RANDOM %899)+ 100))
echo $num2
```

```
num3=$(((RANDOM %899)+ 100))
echo $num3
```

```
num4=$(((RANDOM %899)+ 100))
echo $num4
```

```
num5=$(((RANDOM %899)+ 100))
echo $num5
```

```
echo "find max value"
If[[ $num1 -gt $num2 && $num1 -gt $num3 && $num1
-gt $num4 && $num1 -gt $num5]]
then
echo "$num1 is max value"
```

```
elif[[ $num2 -gt $num1 && $num2 -gt $num3 && $num2 -gt
$num4&&$num2 -gt $num5]]
Then
echo"$num2 is max value"
```

```
elif[[ $num3 -gt $num1 && $num3 -gt $num2 && $num3 -gt
$num4&&$num3-gt $num5]]
Then
echo"$num3 is max value"
```

```
elif[[ $num4 -gt $num1 && $num4 -gt $num2 && $num4 -gt
$num4&&$num4-gt $num5]]
Then
echo"$num4 is max value"
```

```
else
echo "$num5 is max value"
```

fi

echo "find min value"

if[[\$num1 -lt \$num2 && \$num1 -lt \$num3 && \$num1 -lt \$num4 && \$num1 -lt \$num5]]

Then

echo "\$num1 is min value"

elif[[\$num2 -lt \$num1 && \$num2 -lt \$num3 && \$num2 -lt \$num4 && \$num2 -lt \$num5]]

Then

echo "\$num2 is min value"

elif[[\$num3 -lt \$num1 && \$num3 -lt \$num2 && \$num3 -lt \$num4 && \$num3 -lt \$num5]]

echo "\$num3 is min value"

elif[[\$num4 -lt \$num1 && \$num4 -lt \$num2 && \$num4 -lt \$num3 && \$num4 -lt \$num5]]

Then

echo "\$num4 is min value"

else

echo "\$num5 is min value"

fi

7.#!/bin/bash -x

Read -p "enter month [1-12] "month

Read -p "enter date[1-31]"date

if[\$month -ge 3]&&[\$date -ge 20]

Then

echo "true"

elif[\$month -le 6]&&[\$date -le 20]

Then

echo "true"

else

echo "false"

fi

8.

#!/bin/bash -x

echo "leap year"

read -p "enter any year"year

echo \$year

if[\$((year %400)) -eq 0]

```
then
echo"$year is leap year"

elif[$((year %100)) -eq 0]
then
echo"$year is leap year"

elif[$((year %4)) -eq 0]
then
echo"$year is leap year"

else
echo"year is not leap year "
fi
```

```
9.#!/bin/bash -x
heads=0;
tails=1;
```

```
flip=$((RANDOM %2))
echo $flip
if[$head -eq $flip]
then
echo"heads"
else" tails"
fi
```

```
10.#!/bin/bash -x
read -p " enter any number in range 0 to 9:"num
```

```
if[$num-eq 0]
then
echo"zero"
```

```
elif[$num-eq 1]
then
echo"one"
```

```
elif[$num-eq 2]
then
echo"two"
```

```
elif[$num-eq 3]
then
```

```
echo"three"
```

```
elif[$num-eq 4]  
then  
echo"four"
```

```
elif[$num-eq 5]  
then  
echo"five"
```

```
elif[$num-eq 6]  
then  
echo"six"
```

```
elif[$num-eq 7]  
then  
echo"seven"
```

```
elif[$num-eq 8]  
then  
echo"eight"  
else  
echo"nine"  
fi
```

```
11.#!/bin/bash -xelif[$weekday -eq 2]  
Then  
echo"monday"
```

```
read - p"enter the num ":"weekday
```

```
if[$weekday -eq 1]  
Then  
echo"sunday"  
elif[$weekday -eq 2]  
Then  
echo"monday"  
elif[$weekday -eq 3]  
Then  
echo"tuesday "  
elif[$weekday -eq 4]  
Then  
echo"wednesday"
```

```
elif[$weekday -eq 5]
Then
echo"thursday"
elif[$weekday -eq 6]
Then
echo"friday"
elif[$weekday -eq 7]elif[$num -eq 10]
then
echo"ten"
```

```
Then
echo"saturday"
fi
```

```
12.
#!/bin/bash -x
read -p"enter any number like(1,10,100,1000):"num
```

```
if[$num -eq 1]
then
echo"unit"
```

```
elif[$num -eq 10]
then
echo"ten"
```

```
elif[$num -eq 1000]
then
echo"thousand"
```

```
else
echo"wrong input"
fi
```

```
13.
#!/bin/bash-x
read-p "enter value of a:"a
read-p "enter value of b:"b
read-p "enter value of c:"c
```

```
exp1=$((a+b*c))
echo"exp1::$exp1"
exp2=$((c+a/b))
echo"exp2::$exp2"
exp3=$((a%b+c))
echo"exp3::$exp3"
```

```
exp4=$((a*b+c))
echo"exp4:.$exp4"
```

```
#max value
```

```
if[[ $exp1 -gt $exp2 && $exp1 -gt $exp2&& $exp1 -gt $exp4]]
then
    echo "exp1 is max "
```

```
elif[[ $exp2 -gt $exp3 && $exp2 -gt $exp3&& $exp2 -gt $exp4]]
then
    echo "exp2 is max "
```

```
elif[[ $exp3 -gt $exp1 && $exp3 -gt $exp2&& $exp3 -gt $exp4]]
then
    echo "exp3 is max "
else
    echo" exp4 is max"
fi
```

```
#min value
```

```
if[[ $exp1 -gt $exp2 && $exp1 -gt $exp2&& $exp1 -gt $exp4]]
then
    echo "exp1 is min "
```

```
elif[[ $exp2 -gt $exp3 && $exp2 -gt $exp3&& $exp2 -gt $exp4]]
then
    echo "exp2 is min "
```

```
elif[[ $exp3 -gt $exp1 && $exp3 -gt $exp2&& $exp3 -gt $exp4]]
then
    echo "exp3 is min "
else
    echo" exp4 is min"
fi
```

```
14.
```

```
#!/bin/bash-x
```

```
read -p "enter any number in range 0 to 9:"number
```

```
case$number in
```

```
echo"zero";;
```

```

echo "one";;
echo "two";;
echo "three";;
echo "four";;
echo "five";;
echo "six";;
echo "seven";;
echo "eight";;
echo "nine";;
    echo "wrong input ";;
esac

```

15.

```
#!/bin/bash -x
```

```
Read -p "enter number:"n
```

```

case $n in
    echo "sunday"
    ;;
    echo "monday"
    ;;
    echo "tuesday"
    ;;
    echo "wednesday"
    ;;
    echo "thursday"
    ;;
    echo "friday"
    ;;

```

```

echo "saturday"
;;
echo "enter value between 1 to 7"
;;

```

```
esac
```

16.

```
#!/bin/bash -x
```

```
read -p "enter any number like[1,10,100,1000]" number
```

```
case $number in
```

```

echo "unit"
;;

```



```
echo"ten"
;;
echo"hundred"
;;
echo"other"
;;
esac
```

17.

```
#!/bin/bash -x
echo" unit conversion"
echo"1:feet to inch"
echo"2:inch to feet"
echo"3:feet to meter"
echo"4:meter to feet"
```

```
read -p "enter any number 1 to 4:"num
Case $num in
```

```
read -p "unit conversion enter any value"val
feet=$(( $val*12))
echo "$val feet to:$inch feet inch"
;;
```

```
read -p "unit conversion enter any value"val
inch=$(( $val/12))
echo "$val inch to:$inch feet"
;;
```

```
read -p "unit conversion enter any value"val
feet=$(( $val/3.281))
echo "$val feet to: $feet meter"
;;
```

```
read -p "unit conversion enter any value"val
meter=$(( $val*3.281))
echo "$val meter to:$meter feet"
;;
```

```
echo" wrong input"
;;
```

```
esac
```

