

Shell Script Problems

1. Write a shell script to find whether an input integer is even or odd.

Sample Run:

enter a number

11

Number is odd

2. Write a shell script to find out the greatest among three inputs.

Sample Run:

enter the value of a b c

23

33

44

c is greatest

3. Write a shell script to calculate the net salary of an employee in a particular month considering various allowances (TA, DA, HRA) and deductions (INCOME TAX, PROVIDEND FUND) as:

(a) TA=15 percent of basic salary

(b) DA=2 percent of basic salary

(c) HRA=10 percent of basic salary

(d) INCOME TAX=5 percent of salary

(e) PROVIDEND FUND=10 percent of salary

Sample Run:

enter basic salary

2240

net salary is 2540

4. A departmental store announces its festival scheme to customers on cash payment. The scheme is as follows-

(a) If purchase amount is less than 1000 then Tax=2% and discount=10%.

(b) If purchase amount is greater than 1000 then Tax=5 % and discount=20%

Sample Run:

enter purchase amount

3000

cash payment =2550

5. Write a shell script to perform an arithmetic operation upon two inputs. The operation should also be input by the user.

Sample Run:

enter a and b

4

3

enter operation to be performed (+,-,*,/)

+

Result after performing operation on a and b is 7

6. Write a shell script to find out the length of an input string.

Sample Run:

enter string

unix

length of string = 4

7. Write a shell script to find whether an input year is leap year or not.

Sample Run:

enter year

2008

leap year

8. Make a duplicate copy of a specified file through command-line.

Sample Run: `$/ex8.sh a1.txt a1.out`

file to be copied : a1.txt

new file name : a1.out

copy successful

9. Write a shell script to concatenate two strings input by the user.

Sample Run:

enter two string

Shell

Programming

After concatenate : Shell Programming

10. Write a shell script to concatenate files.

11. Program for command-line parameter & special variable.

Sample Run: `$/ex11.sh a s d f g`

the first parameter : a

the second parameter : s

the number of parameters are : 5

the parameters are : a s d f g

12. Generate a table of an input integer.

Sample Run:

input number

4

4
8
12
16
20
24
28
32
36
40

13. Write a shell script to print all the multiplication tables (up to 10) between two given numbers.

Sample Run:

enter lower limit

2

enter higher limit

4

Table of 2 is

2 * 1 = 2

2 * 2 = 4

2 * 3 = 6

2 * 4 = 8

2 * 5 = 10

2 * 6 = 12

2 * 7 = 14

2 * 8 = 16

2 * 9 = 18

2 * 10 = 20

Table of 3 is

3 * 1 = 3

3 * 2 = 6

3 * 3 = 9

3 * 4 = 12

3 * 5 = 15

3 * 6 = 18

3 * 7 = 21

3 * 8 = 24

3 * 9 = 27

3 * 10 = 30

Table of 4 is

4 * 1 = 4

4 * 2 = 8

4 * 3 = 12

4 * 4 = 16
4 * 5 = 20
4 * 6 = 24
4 * 7 = 28
4 * 8 = 32
4 * 9 = 36
4 * 10 = 40

- 14. Write a shell script to find out the ny , where n and y must be input by the user.**

Sample Run:

enter a number
4
enter the power
2
16

- 15. Write a shell script to find out the factorial of an input.**

Sample Run:

enter the number
4
Factorial of 4 is 24

- 16. Write a shell script to generate the series of even number from 0 to n. 0 2 4 n**

Sample Run:

enter value of n
5
0 2 4

- 17. Write a shell script to check whether an input is a prime or not.**

Sample Run:

enter number
4
number is not prime
##
enter number
7
number is prime

- 18. Write a shell script to generate the primes between two given numbers**

Sample Run:

enter two numbers
22
2
3

5
7
11
13
17
19

19. Write a shell script to find out the sum of series $1+2+3+\dots+n$, where n is input by the user.

Sample Run:

enter value of n

12

Sum of series is 78

20. Write a shell script to generate the series $2,4,6,8,\dots,n$, where n must be input by the user.

Sample Run:

enter value of n

21

2, 4, 6, 8, 10, 12, 14, 16, 18, 20