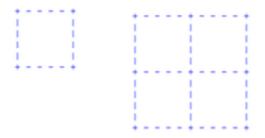
## **Department of Computer Science and Engineering Jaypee University of Engineering and Technology**

## 18B17CI373 - Advanced Programming Lab-I

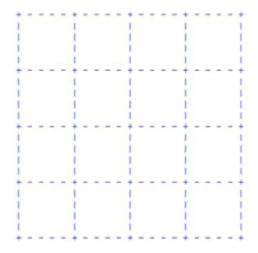
## Lab Exercise 6

## Write python scripts of following questions using functions.

- 1. Calculate simple interest.
- 2. Find the area of a triangle.
- 3. Calculate compound interest.
- 4. Find the value of force when mass of a body and its acceleration is given. 5. Calculate the factorial of the given number
- 5. Convert a temperature from Celsius to Fahrenheit.
- 6. Convert a temperature from Fahrenheit to Celsius.
- 7. Compute the area of the circle, when its diameter is given.
- 8. Compute the area of a cylinder, when its height and diameter is given.
- 9. Compute the volume of a cylinder, when its height and diameter is given.
- 10. Compute the area of a rectangular prism, when its all sides are given.
- 11. Compute the volume of a rectangular prism, when its all sides are given.
- 12. Write a python function to print following shapes (Hint: to print more than one value on a line, you can print a comma separated sequence, print one symbol at a time, don't print whole line in a single print statement)



13. Write a python function to print following shape



- 14. Repeat above Python script to print shapes other than square (Optional).
- 15. Write a function named **rightjustify** that takes a string named s as a parameter and prints the string with enough leading spaces.
- 16. A function object is a value you can assign to a variable or pass as an argument. For example, **do\_twice** is a function that takes a function object as an argument and calls it twice:

```
def do_twice(f):
f()
f()
```

Here's an example that uses do twice to call a function named print spam twice.

- A. Type this example into a script and test it.
- B. Modify do\_twice so that it takes two arguments, a function object and a value, and calls the function twice, passing the value as an argument.
- C. Write a more general version of print\_sp, called print\_2ice, which takes a string as a parameter and prints it twice.
- D. Use the modified version of do\_2ice to call print\_2ice twice, passing 'spam' as an argument.
- 17. Write a function to print number 1 to 10 in ascending or descending order, based on user choice.