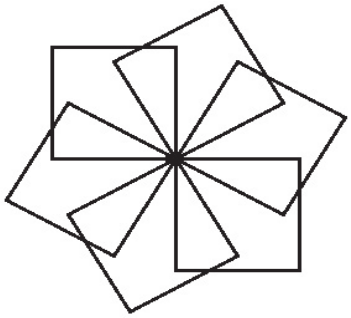
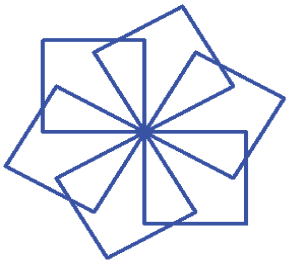
ICT PRACTICAL WORKSHEET - Std X

4.2

Name of Chapter		**Unit 4 - Python Graphics**
Name of Activity		Creating a pattern using squares
Software used		IDLE (Using Python 3.4)
Time		40 Minutes

Order of events

Open Software		Open Python in the order Application→Programming→IDLE (Using Python 3.4) Click on File→New to open python program editor
Add commands for graphic shapes to work		***from turtle import****
Type the commands below turtle command. **for i in range(6):** **right(60)** for printing the squre six times and for rotating the squares by 60 degrees. **for j in range(4):** **forward(100)** **right(90)** for drawing a square		***clear()*** ***pensize(3)*** ***for i in range(6):*** ***right(60)*** ***for j in range(4):*** ***forward(100)*** ***right(90)*** 
Save and Run		Save the programme (File→Save) with a name(Say: program4.3) in your folder. To run the programme Click Run→Run Module or press F5
Changing the colour of pattern. To print the pattern in blue colour add **color("blue")** command		*from turtle import** *clear()* *pensize(3)* *for i in range(6):* *right(60)* ***color("blue")*** *for j in range(4):* *forward(100)* *right(90)*  Save and Run Module to observe changes

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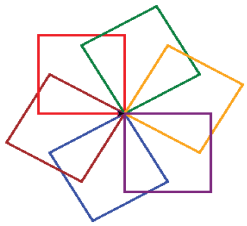
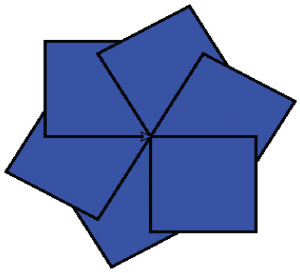
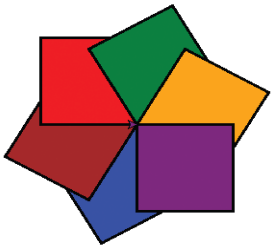
creating shapes in different colours		*from turtle import** *clear()* *pensize(3)* ***clr=[“blue”,”brown”,”red”,”green”,”orange”,”purple”]*** ***for i in clr:*** *right(60)* ***color(i)*** *for j in range(4):* *forward(100)* *rt(90)*  *Save and Run Module to observe changes*

Filling the patterns.
 	
Give the instruction to fill the spaces in the pattern with blue colour and to draw the border in black
	www.spandanamnews.blogspot.in	from turtle import*
		clear()
		pensize(3)
		for i in range(6):
		right(60)
		color(“black”,”blue”)
		begin_fill()
		for j in range(4):
		forward(100)
		rt(90)
		end_fill()
		 
		Save and Run Module to observe changes

Making Changes in code to get different colours for different spaces		from turtle import* clear() pensize(3) **clr=[“blue”,”brown”,”red”,”green”,”orange”,”purple”]** **for i in clr:** right(60) color(“black”,i) begin_fill() for j in range(4): forward(100) rt(90) end_fill()  Save and Run Module to observe changes

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