The boundary lines y=2 and y=2x+3 are drawn as solid, because both inequalities use the \leq sign. The solution to $y\leq 2$ is shown in blue and the solution to $y\leq 2x+3$ is shown in orange. The solution to the system is the overlap region, shown in purple. You can check this by substituting the point (0,0) into the inequalities: $0\leq 2$ and $0\leq 0+3$ are both true.