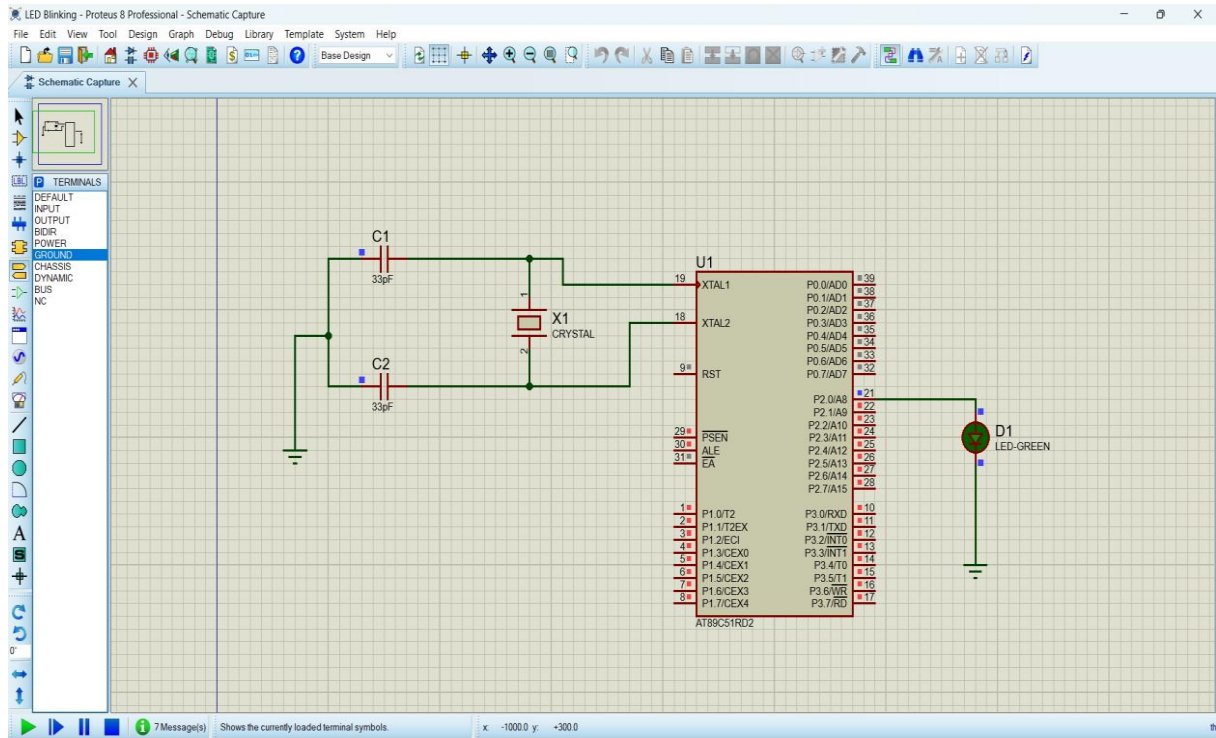


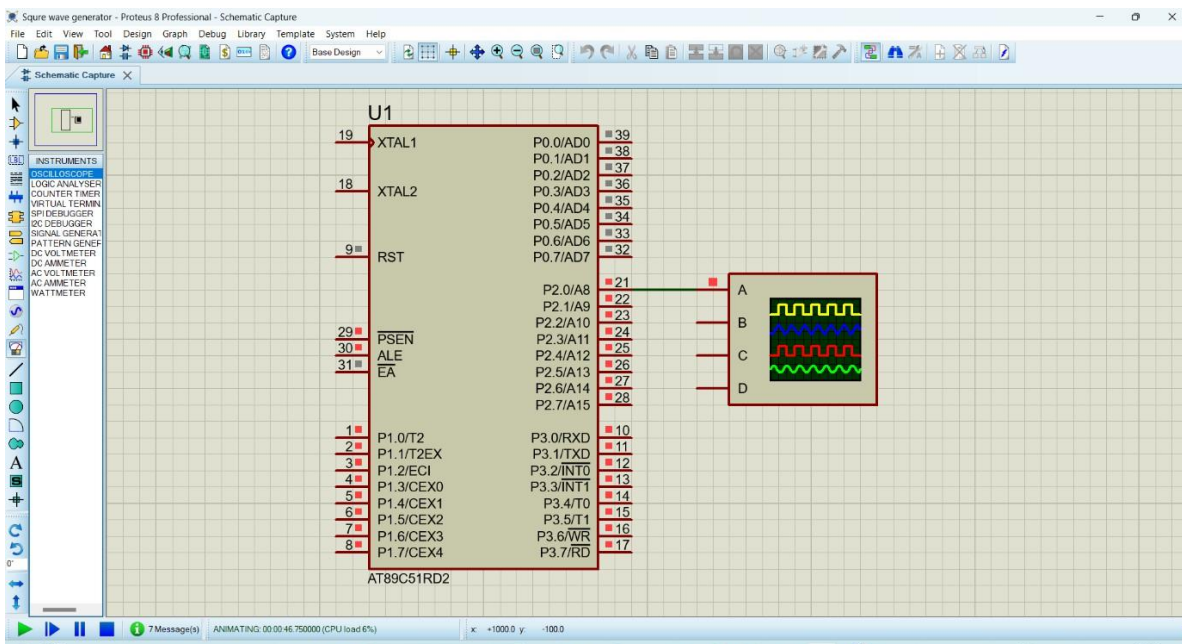
EX-2

DIAGRAM:

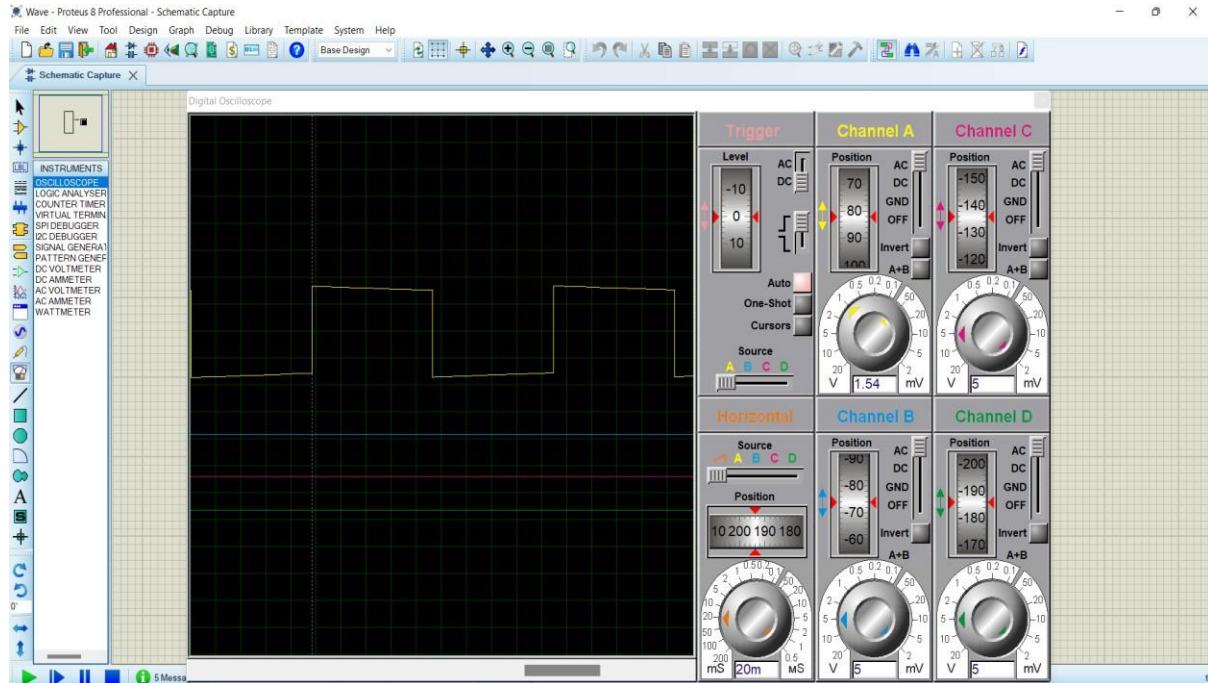


Exp No: 3

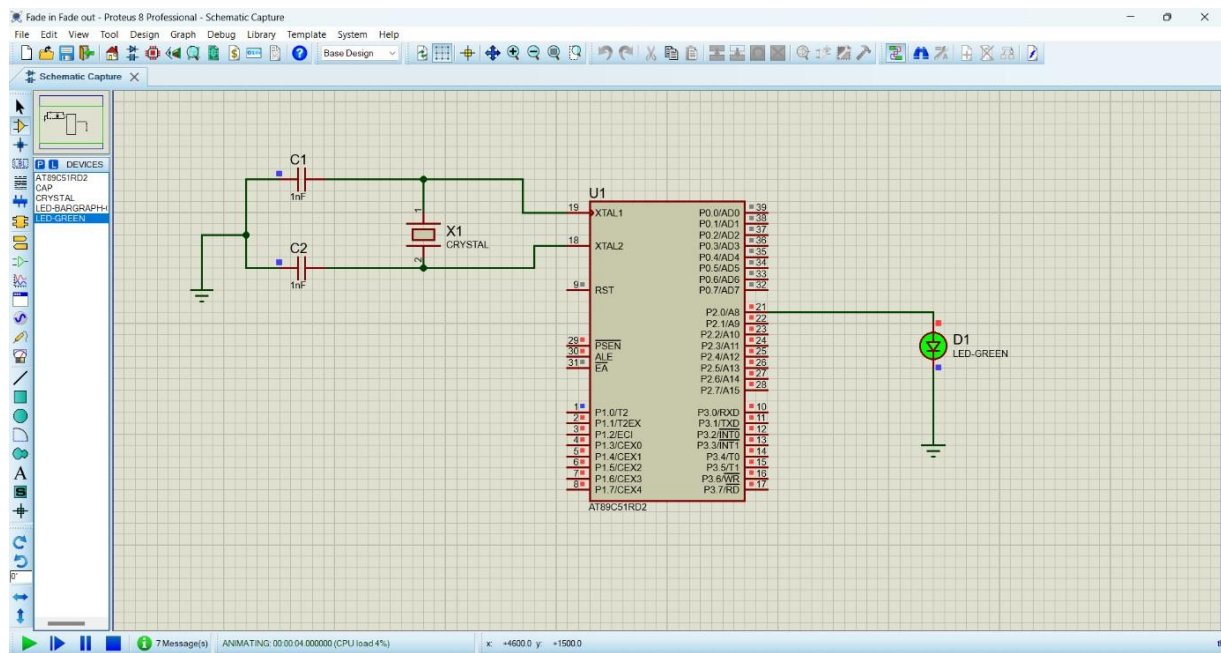
CIRCUIT DIAGRAM:



OUTPUT

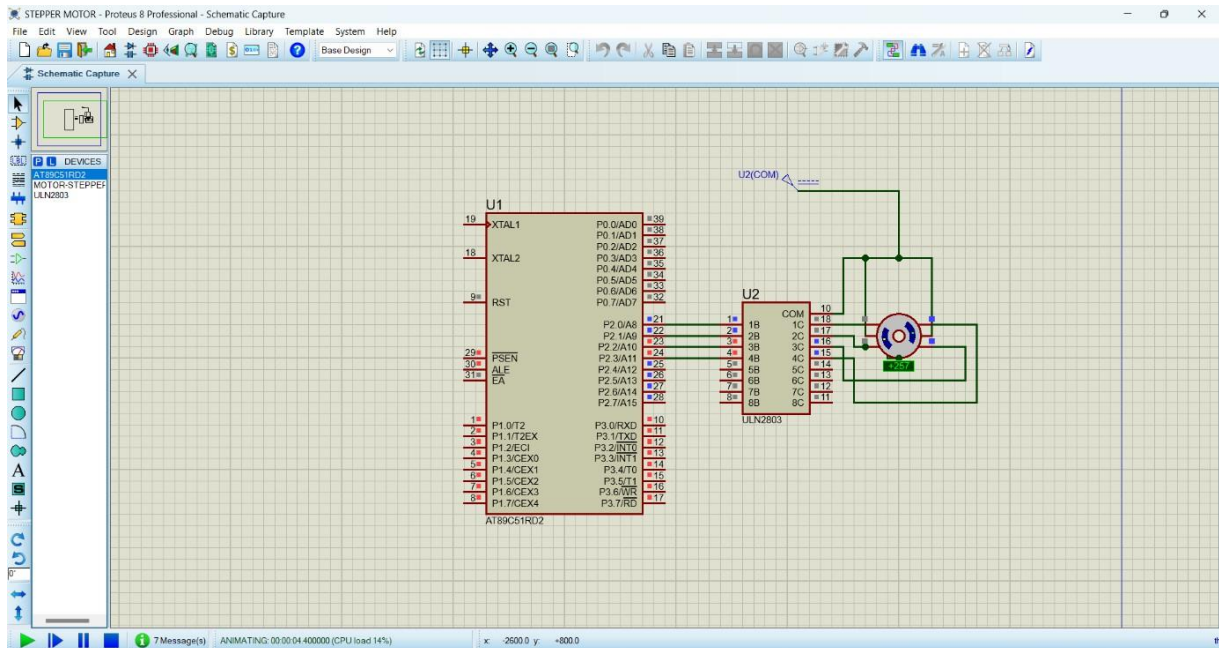


EX-4



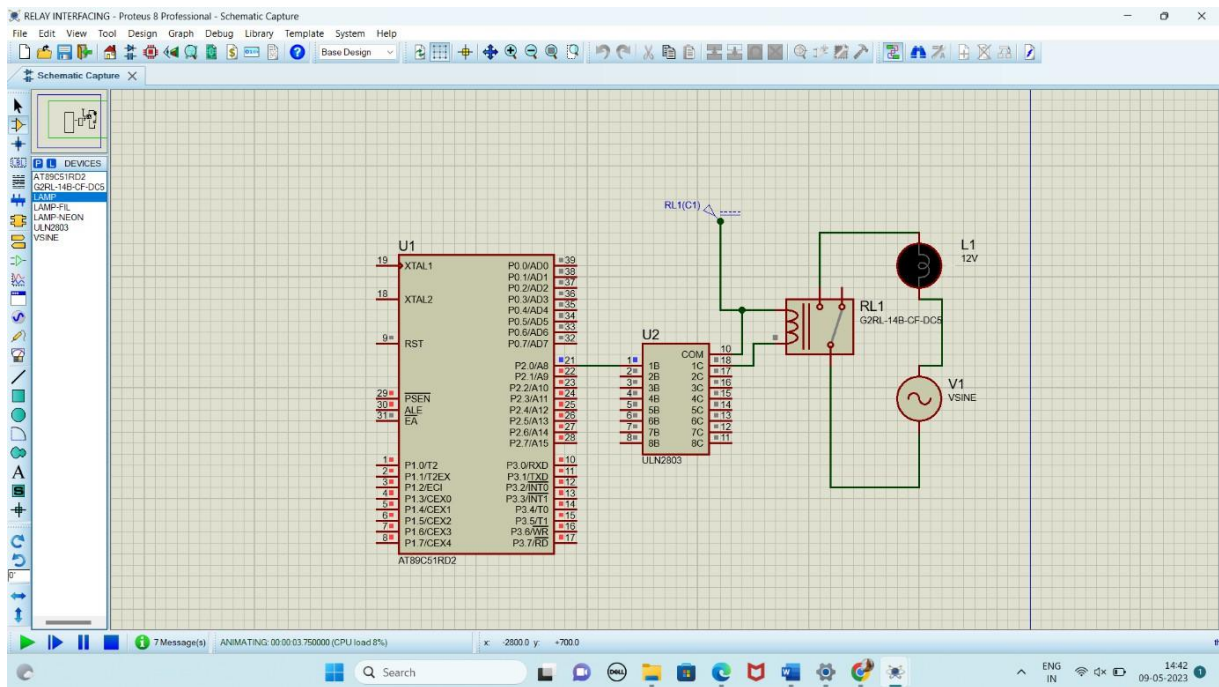
Exp No: 5

CIRCUIT DIAGRAM:



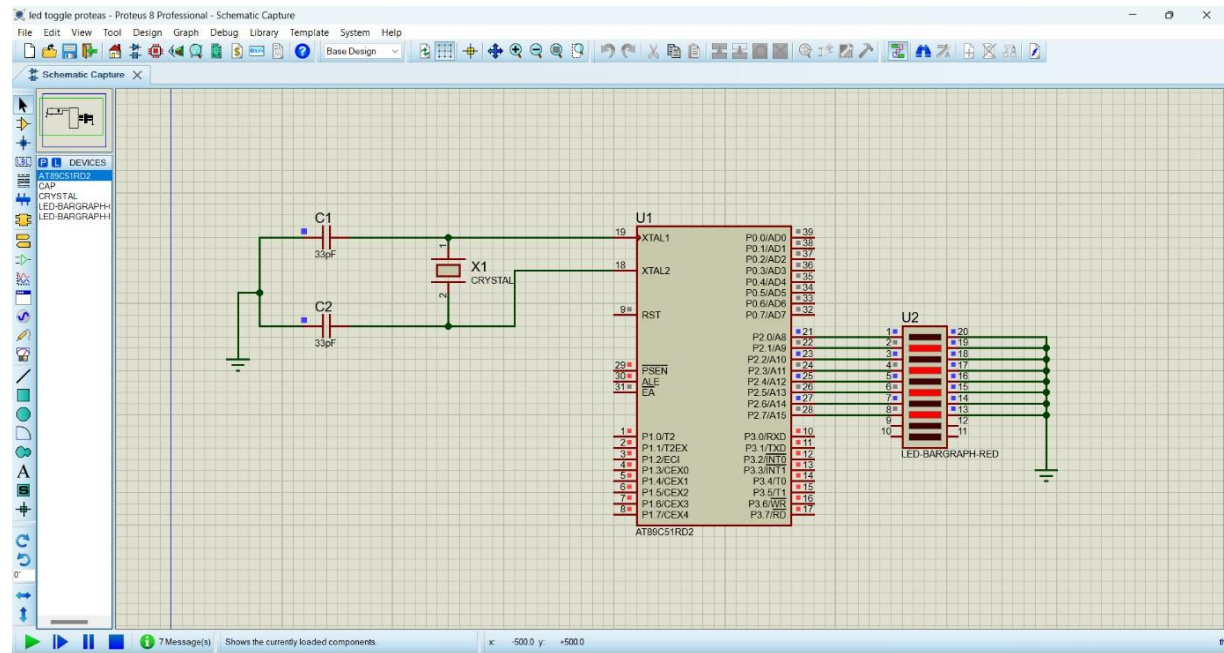
Exp No: 6

CIRCUIT DIAGRAM:

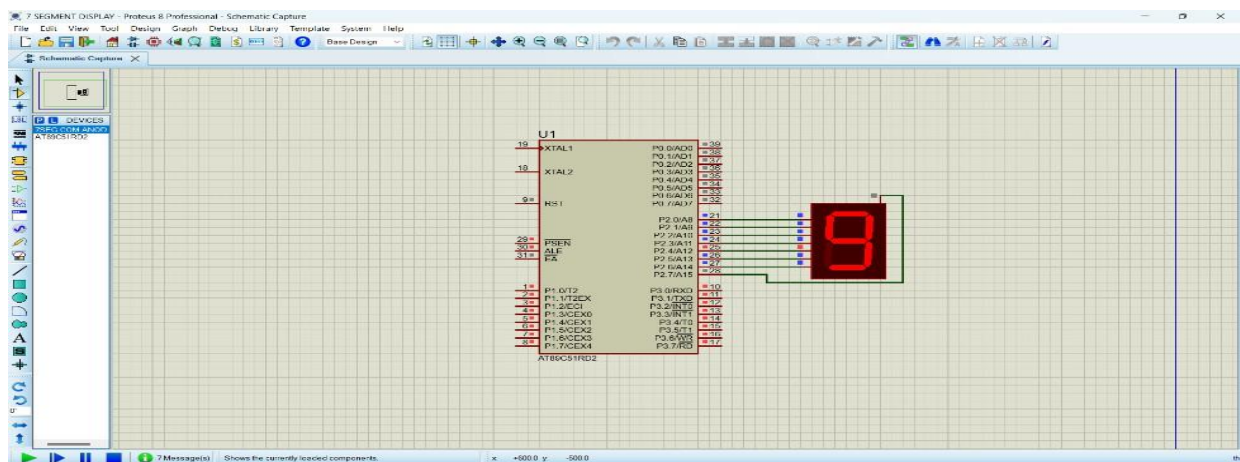


Exp No: 7

CIRCUIT DIAGRAM:

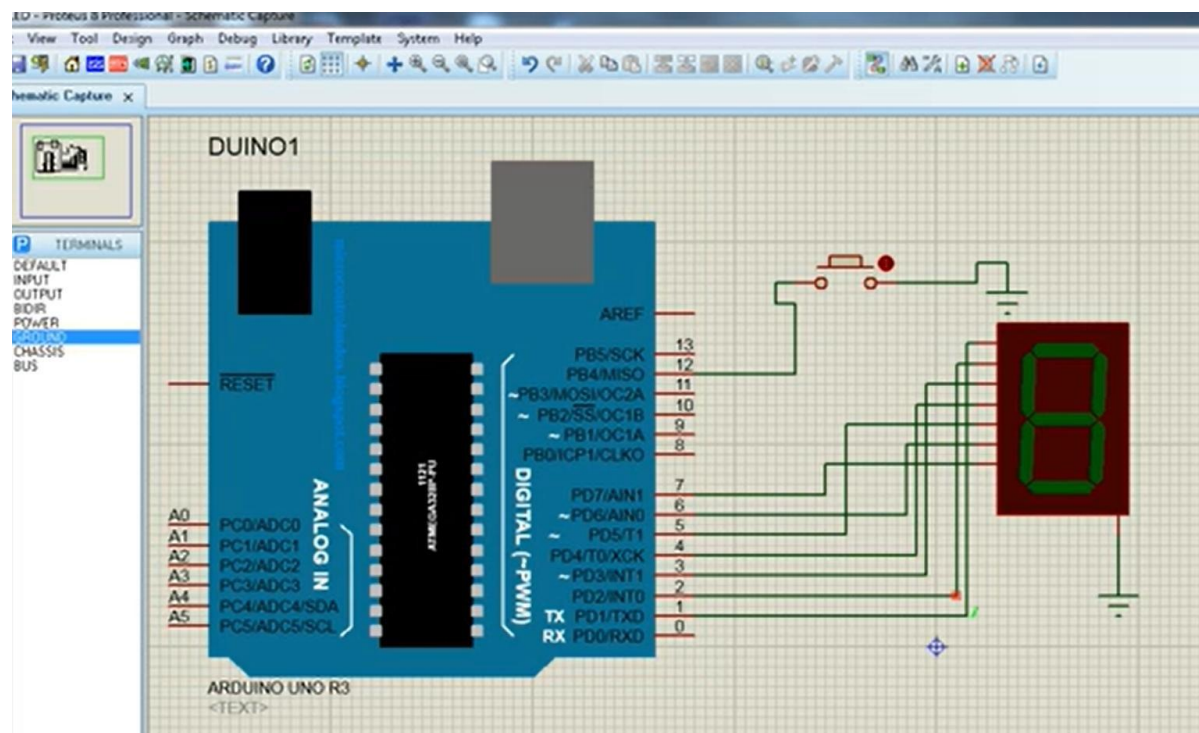


EX-8

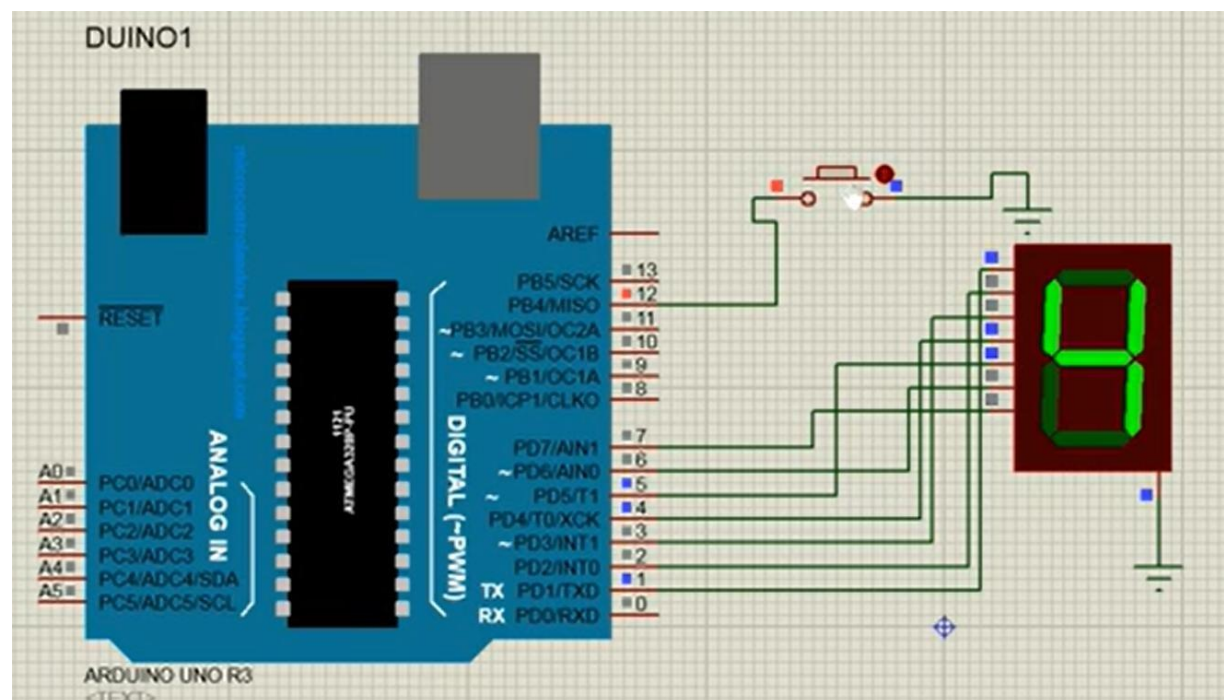


EX-10

CIRCUIT DIAGRAM:

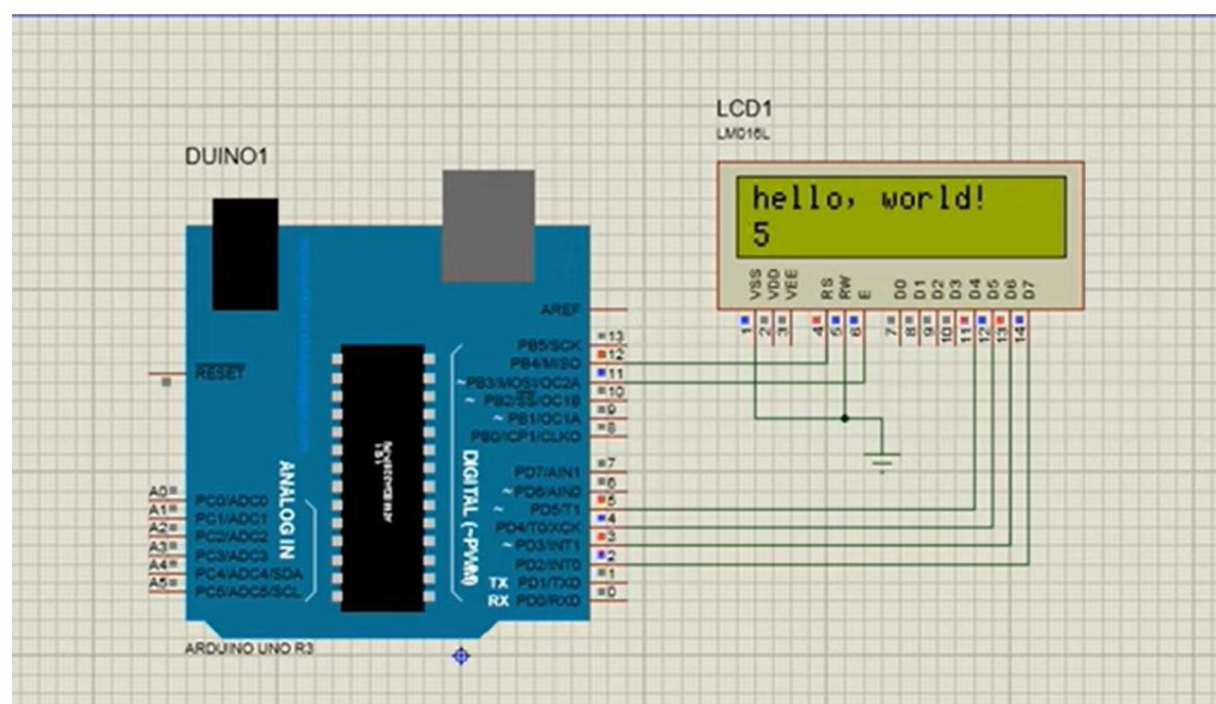


OUTPUT:



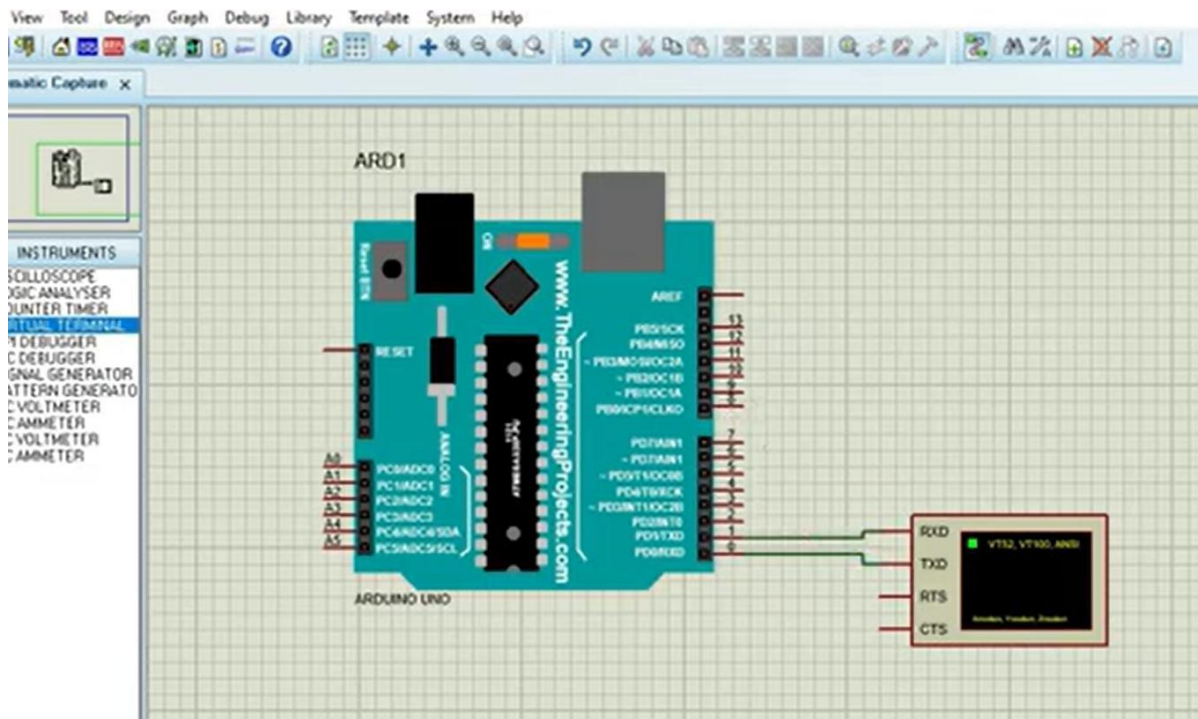
[illegible]

OUTPUT:

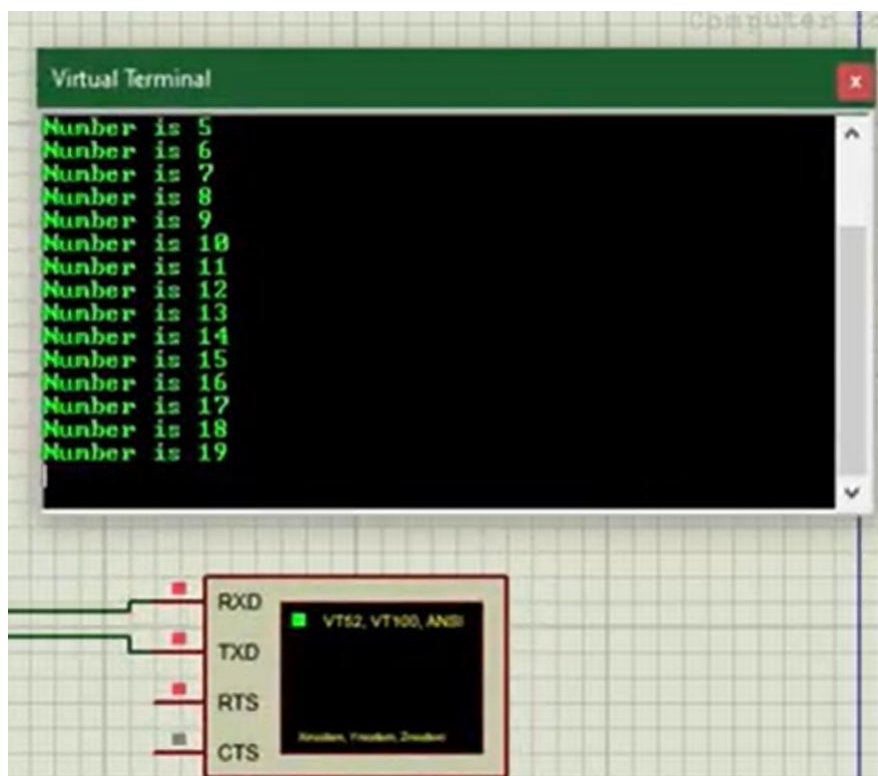


Exp No: 12

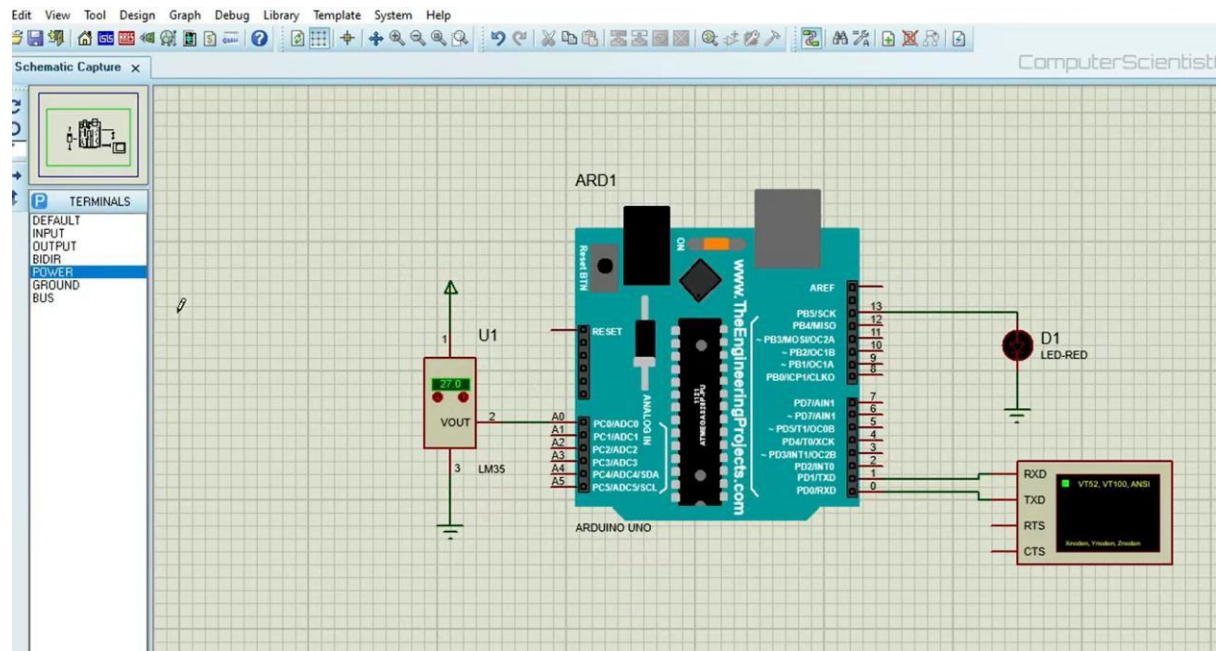
CIRCUIT DIAGRAM:



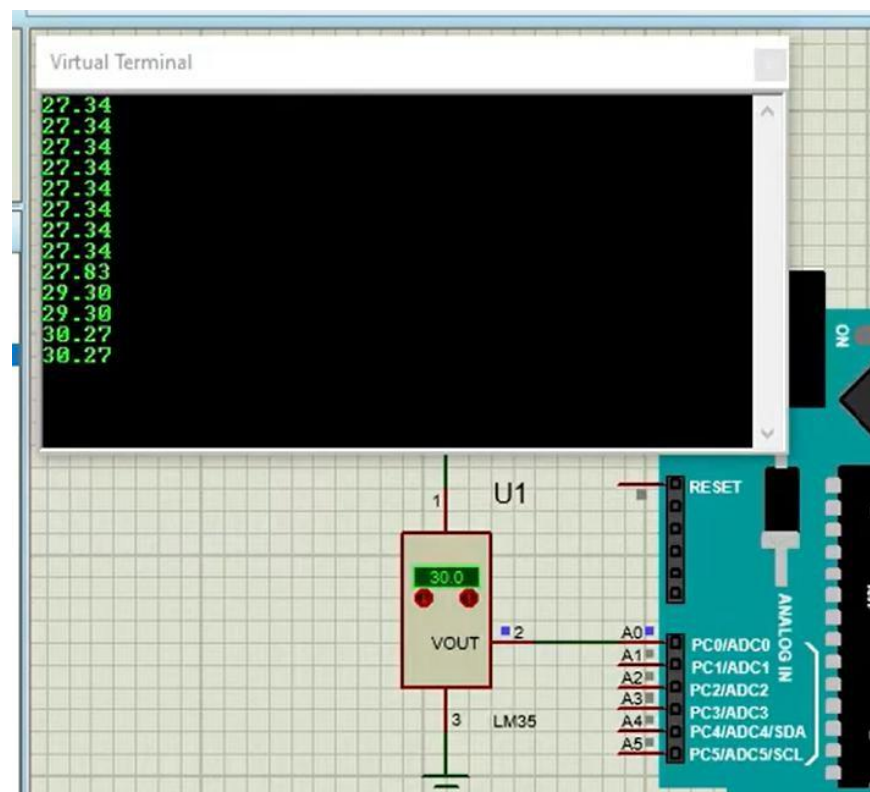
OUTPUT:



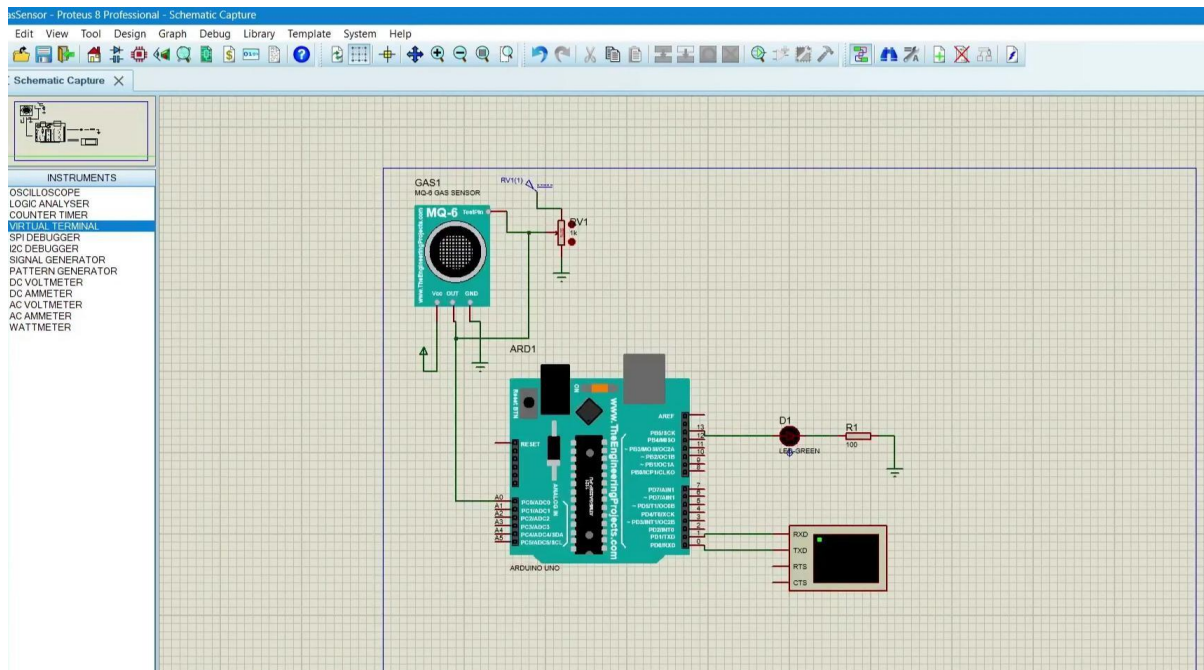
CIRCUIT DIAGRAM:



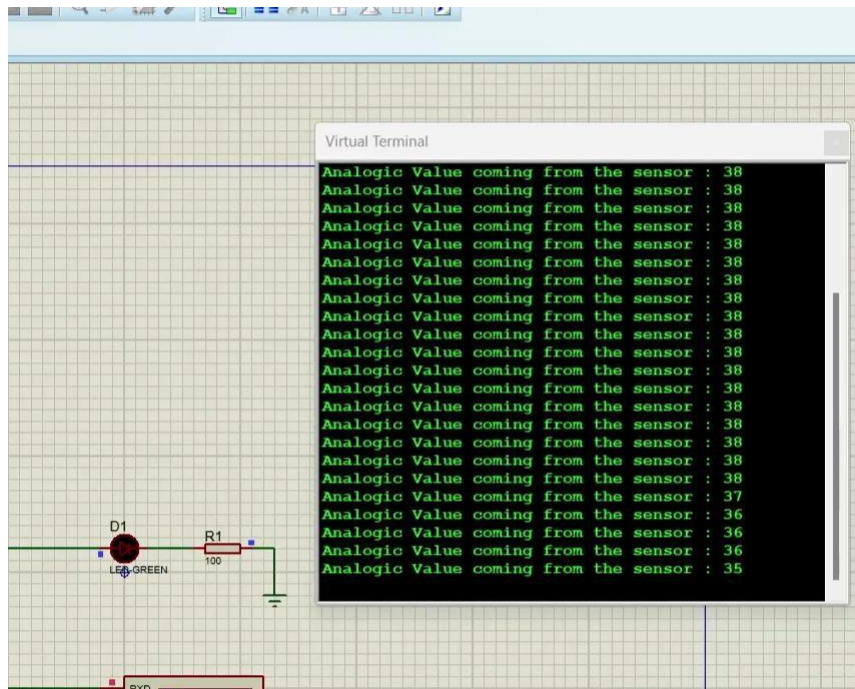
OUTPUT:



Exp No: 14
CIRCUIT DIAGRAM:



OUTPUT:

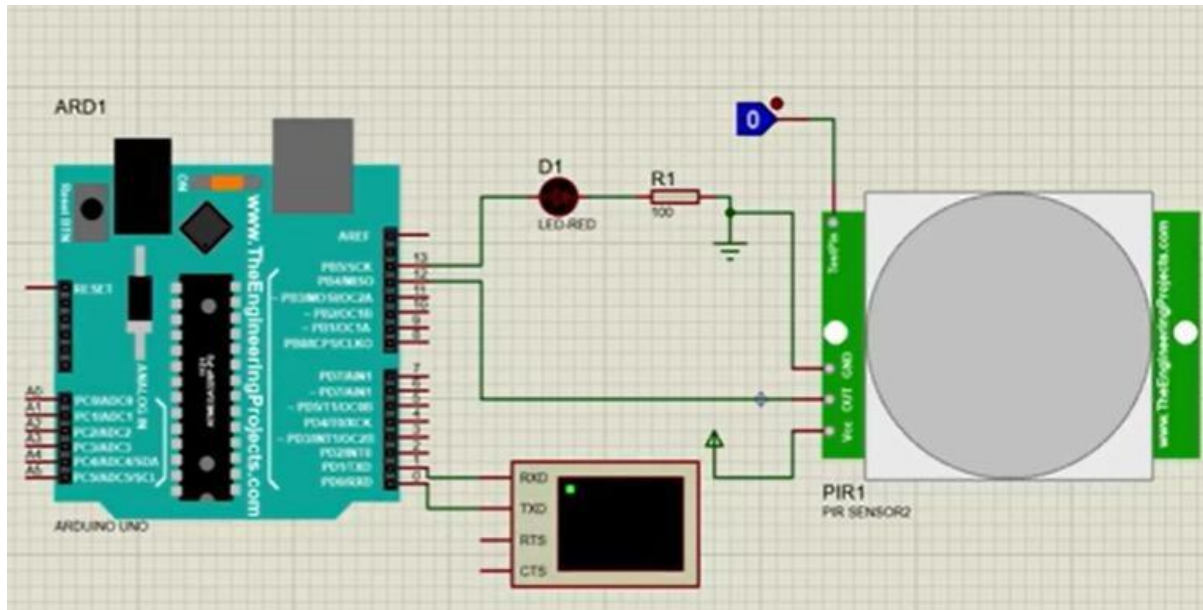


The screenshot shows the Proteus software interface. At the top, there is a 'Schematic Capture' window. Below it, a schematic diagram is visible, showing a microcontroller board labeled 'ARD1'. The board has various components, including a reset button, a crystal oscillator, and several pins labeled with pin headers. A 'VIRTUAL TERMINAL' window is open, displaying a list of distance measurements in centimeters. The measurements are as follows:

Distance	Value
Distance =	241 cm
Distance =	241 cm
Distance =	230 cm
Distance =	220 cm
Distance =	208 cm
Distance =	206 cm
Distance =	201 cm
Distance =	201 cm
Distance =	201 cm
Distance =	201 cm
Distance =	201 cm
Distance =	201 cm
Distance =	201 cm
Distance =	201 cm
Distance =	201 cm
Distance =	201 cm
Distance =	2

The schematic diagram shows a microcontroller board (ARD1) with various components and pins labeled. The pins are labeled with pin headers: A0, A1, A2, A3, A4, A5, PC0/ADC1, PC1/ADC2, PC2/ADC3, PC3/ADC4, PC4/ADC5, PC5/ADC6, PC6/ADC7, PC7/ADC8, PC8/ADC9, PC9/ADC10, PC10/ADC11, PC11/ADC12, PC12/ADC13, PC13/ADC14, PC14/ADC15, PC15/ADC16, PC16/ADC17, PC17/ADC18, PC18/ADC19, PC19/ADC20, PC20/ADC21, PC21/ADC22, PC22/ADC23, PC23/ADC24, PC24/ADC25, PC25/ADC26, PC26/ADC27, PC27/ADC28, PC28/ADC29, PC29/ADC30, PC30/ADC31, PC31/ADC32, PC32/ADC33, PC33/ADC34, PC34/ADC35, PC35/ADC36, PC36/ADC37, PC37/ADC38, PC38/ADC39, PC39/ADC40, PC40/ADC41, PC41/ADC42, PC42/ADC43, PC43/ADC44, PC44/ADC45, PC45/ADC46, PC46/ADC47, PC47/ADC48, PC48/ADC49, PC49/ADC50, PC50/ADC51, PC51/ADC52, PC52/ADC53, PC53/ADC54, PC54/ADC55, PC55/ADC56, PC56/ADC57, PC57/ADC58, PC58/ADC59, PC59/ADC60, PC60/ADC61, PC61/ADC62, PC62/ADC63, PC63/ADC64, PC64/ADC65, PC65/ADC66, PC66/ADC67, PC67/ADC68, PC68/ADC69, PC69/ADC70, PC70/ADC71, PC71/ADC72, PC72/ADC73, PC73/ADC74, PC74/ADC75, PC75/ADC76, PC76/ADC77, PC77/ADC78, PC78/ADC79, PC79/ADC80, PC80/ADC81, PC81/ADC82, PC82/ADC83, PC83/ADC84, PC84/ADC85, PC85/ADC86, PC86/ADC87, PC87/ADC88, PC88/ADC89, PC89/ADC90, PC90/ADC91, PC91/ADC92, PC92/ADC93, PC93/ADC94, PC94/ADC95, PC95/ADC96, PC96/ADC97, PC97/ADC98, PC98/ADC99, PC99/ADC100, PC100/ADC101, PC101/ADC102, PC102/ADC103, PC103/ADC104, PC104/ADC105, PC105/ADC106, PC106/ADC107, PC107/ADC108, PC108/ADC109, PC109/ADC110, PC110/ADC111, PC111/ADC112, PC112/ADC113, PC113/ADC114, PC114/ADC115, PC115/ADC116, PC116/ADC117, PC117/ADC118, PC118/ADC119, PC119/ADC120, PC120/ADC121, PC121/ADC122, PC122/ADC123, PC123/ADC124, PC124/ADC125, PC125/ADC126, PC126/ADC127, PC127/ADC128, PC128/ADC129, PC129/ADC130, PC130/ADC131, PC131/ADC132, PC132/ADC133, PC133/ADC134, PC134/ADC135, PC135/ADC136, PC136/ADC137, PC137/ADC138, PC138/ADC139, PC139/ADC140, PC140/ADC141, PC141/ADC142, PC142/ADC143, PC143/ADC144, PC144/ADC145, PC145/ADC146, PC146/ADC147, PC147/ADC148, PC148/ADC149, PC149/ADC150, PC150/ADC151, PC151/ADC152, PC152/ADC153, PC153/ADC154, PC154/ADC155, PC155/ADC156, PC156/ADC157, PC157/ADC158, PC158/ADC159, PC159/ADC160, PC160/ADC161, PC161/ADC162, PC162/ADC163, PC163/ADC164, PC164/ADC165, PC165/ADC166, PC166/ADC167, PC167/ADC168, PC168/ADC169, PC169/ADC170, PC170/ADC171, PC171/ADC172, PC172/ADC173, PC173/ADC174, PC174/ADC175, PC175/ADC176, PC176/ADC177, PC177/ADC178, PC178/ADC179, PC179/ADC180, PC180/ADC181, PC181/ADC182, PC182/ADC183, PC183/ADC184, PC184/ADC185, PC185/ADC186, PC186/ADC187, PC187/ADC188, PC188/ADC189, PC189/ADC190, PC190/ADC191, PC191/ADC192, PC192/ADC193, PC193/ADC194, PC194/ADC195, PC195/ADC196, PC196/ADC197, PC197/ADC198, PC198/ADC199, PC199/ADC200, PC200/ADC201, PC201/ADC202, PC202/ADC203, PC203/ADC204, PC204/ADC205, PC205/ADC206, PC206/ADC207, PC207/ADC208, PC208/ADC209, PC209/ADC210, PC210/ADC211, PC211/ADC212, PC212/ADC213, PC213/ADC214, PC214/ADC215, PC215/ADC216, PC216/ADC217, PC217/ADC218, PC218/ADC219, PC219/ADC220, PC220/ADC221, PC221/ADC222, PC222/ADC223, PC223/ADC224, PC224/ADC225, PC225/ADC226, PC226/ADC227, PC227/ADC228, PC228/ADC229, PC229/ADC230, PC230/ADC231, PC231/ADC232, PC232/ADC233, PC233/ADC234, PC234/ADC235, PC235/ADC236, PC236/ADC237, PC237/ADC238, PC238/ADC239, PC239/ADC240, PC240/ADC241, PC241/ADC242, PC242/ADC243, PC243/ADC244, PC244/ADC245, PC245/ADC246, PC246/ADC247, PC247/ADC248, PC248/ADC249, PC249/ADC250, PC250/ADC251, PC251/ADC252, PC252/ADC253, PC253/ADC254, PC254/ADC255, PC255/ADC256, PC256/ADC257, PC257/ADC258, PC258/ADC259, PC259/ADC260, PC260/ADC261, PC261/ADC262, PC262/ADC263, PC263/ADC264, PC264/ADC265, PC265/ADC266, PC266/ADC267, PC267/ADC268, PC268/ADC269, PC269/ADC270, PC270/ADC271, PC271/ADC272, PC272/ADC273, PC273/ADC274, PC274/ADC275, PC275/ADC276, PC276/ADC277, PC277/ADC278, PC278/ADC279, PC279/ADC280, PC280/ADC281, PC281/ADC282, PC282/ADC283, PC283/ADC284, PC284/ADC285, PC285/ADC286, PC286/ADC287, PC287/ADC288, PC288/ADC289, PC289/ADC290, PC290/ADC291, PC291/ADC292, PC292/ADC293, PC293/ADC294, PC294/ADC295, PC295/ADC296, PC296/ADC297, PC297/ADC298, PC298/ADC299, PC299/ADC300, PC300/ADC301, PC301/ADC302, PC302/ADC303, PC303/ADC304, PC304/ADC305, PC305/ADC306, PC306/ADC307, PC307/ADC308, PC308/ADC309, PC309/ADC310, PC310/ADC311, PC311/ADC312, PC312/ADC313, PC313/ADC314, PC314/ADC315, PC315/ADC316, PC316/ADC317, PC317/ADC318, PC318/ADC319, PC319/ADC320, PC320/ADC321, PC321/ADC322, PC322/ADC323, PC323/ADC324, PC324/ADC325, PC325/ADC326, PC326/ADC327, PC327/ADC328, PC328/ADC329, PC329/ADC330, PC330/ADC331, PC331/ADC332, PC332/ADC333, PC333/ADC334, PC334/ADC335, PC335/ADC336, PC336/ADC337, PC337/ADC338, PC338/ADC339, PC339/ADC340, PC340/ADC341, PC341/ADC342, PC342/ADC343, PC343/ADC344, PC344/ADC345, PC345/ADC346, PC346/ADC347, PC347/ADC348, PC348/ADC349, PC349/ADC350, PC350/ADC351, PC351/ADC352, PC352/ADC353, PC353/ADC354, PC354/ADC355, PC355/ADC356, PC356/ADC357, PC357/ADC358, PC358/ADC359, PC359/ADC360, PC360/ADC361, PC361/ADC362, PC362/ADC363, PC363/ADC364, PC364/ADC365, PC36

Exp No: 16
CIRCUIT DIAGRAM:



EX-22

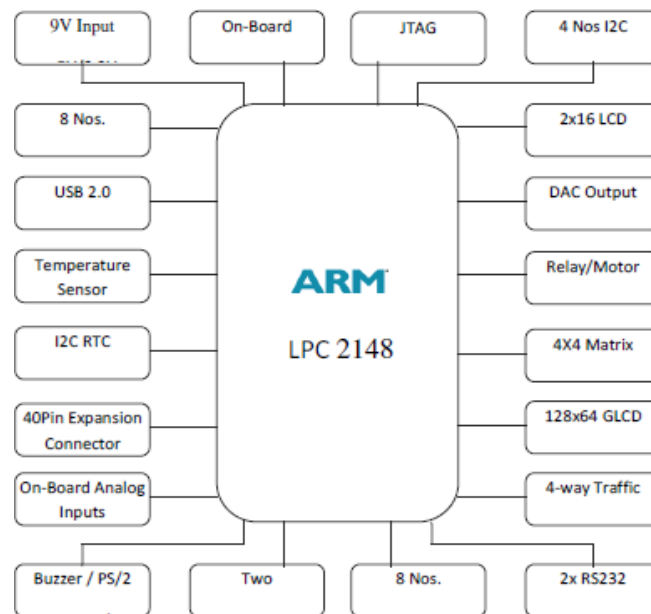


Figure - 3.1: ARM Processor

Pin Configuration

