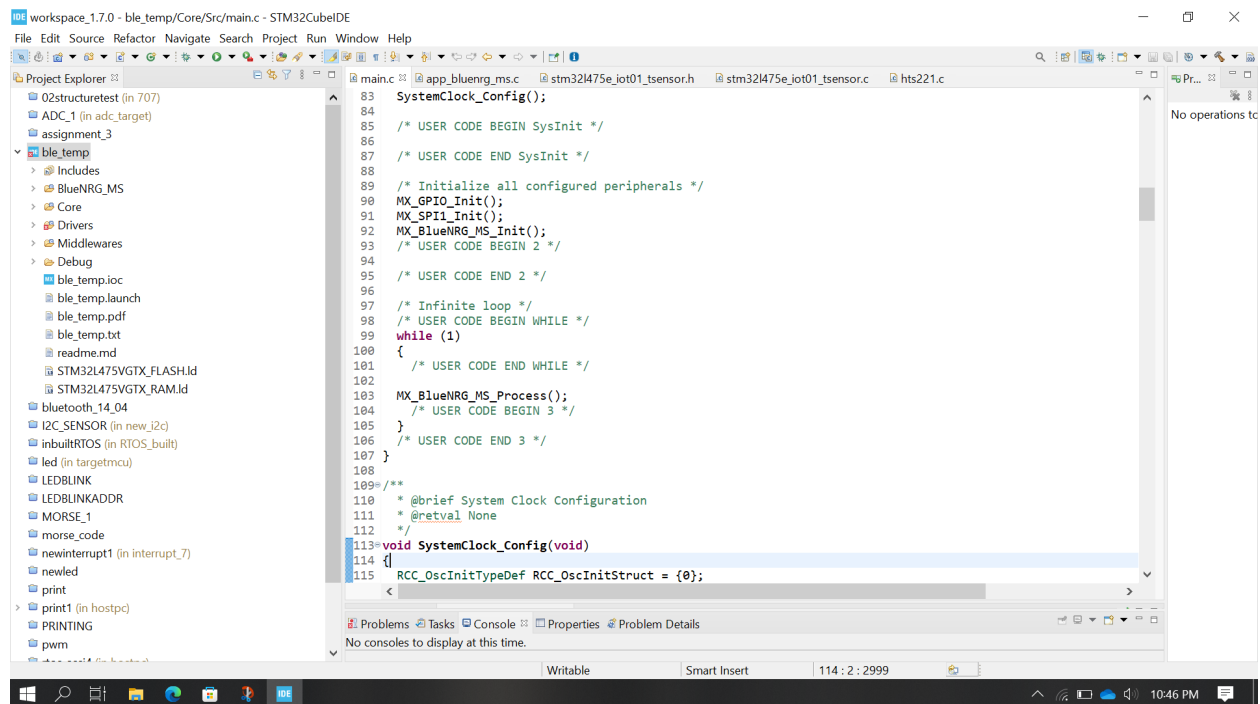
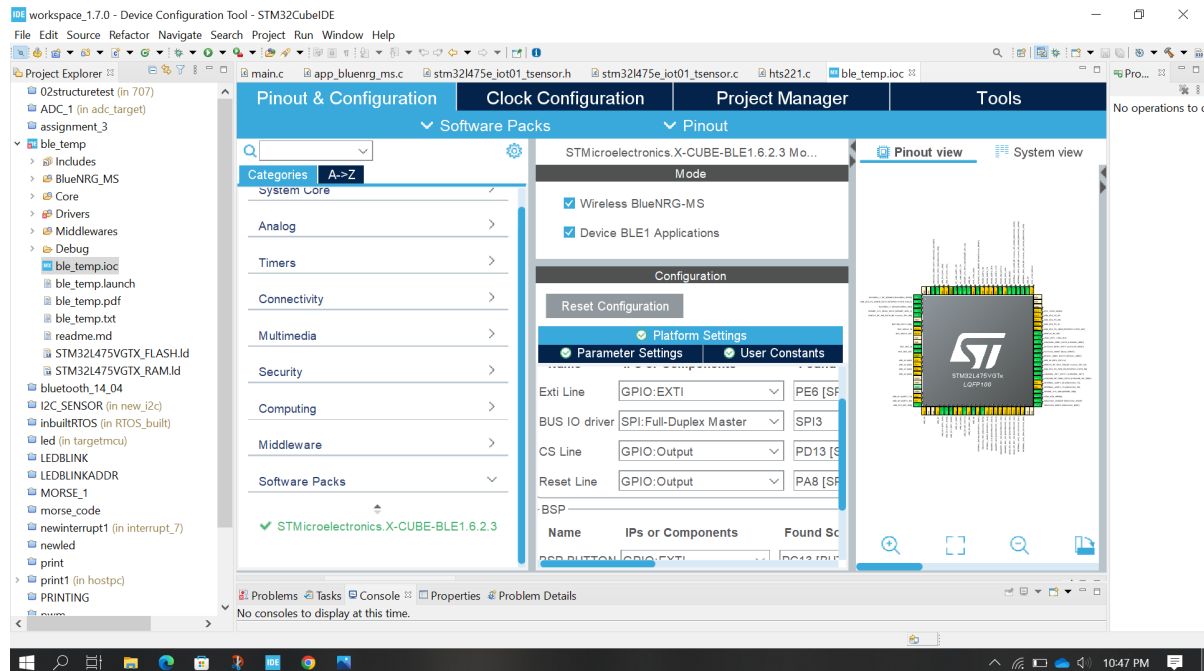


ASSIGNMENT - 6

Bluetooth implementation using cubeIDE.





Environmental



27.0 [°C]

°C/°F ☐

+/-

0.0



1062.00 [mBar]

+/-

0.0

```
92  /* USER CODE END 2 */
93
94  /* Infinite loop */
95  /* USER CODE BEGIN WHILE */
96  while (1)
97  {
98      /* USER CODE END WHILE */
99
100     MX_BlueNRG_MS_Process();
101     /* USER CODE BEGIN 3 */
102 }
103 /* USER CODE END 3 */
104 }
105
106 /**
107  * @brief System Clock Configuration
108  * @retval None
109  */
110 void SystemClock_Config(void)
111 {
112     RCC_OscInitTypeDef RCC_OscInitStruct = {0};
113     RCC_ClkInitTypeDef RCC_ClkInitStruct = {0};
114
115     /** Configure the main internal regulator output voltage
116     */
117     if (HAL_PWREx_ControlVoltageScaling(PWR_REGULATOR_VOLTAGE_SCALE1) != HAL_OK)
118     {
119         Error_Handler();
120     }
121     /** Initializes the RCC Oscillators according to the specified parameters
122     * in the RCC_OscInitTypeDef structure.
123     */
124     RCC_OscInitStruct.OscillatorType = RCC_OSCILLATORTYPE_MSI;
```

After entering into the while loop we get notification of turning on the bluetooth in the mobile app. And get the temperature value after connecting to bluetooth.

```
77
78  /* USER CODE BEGIN Init */
79
80  /* USER CODE END Init */
81
82  /* Configure the system clock */
83  SystemClock_Config();
84
85  /* USER CODE BEGIN SysInit */
86
87  /* USER CODE END SysInit */
88
89  /* Initialize all configured peripherals */
90  MX_GPIO_Init();
91  MX_SPI1_Init();
92  MX_BlueNRG_MS_Init();
93  /* USER CODE BEGIN 2 */
94
95  /* USER CODE END 2 */
96
97  /* Infinite loop */
98  /* USER CODE BEGIN WHILE */
99  while (1)
100  {
101      /* USER CODE END WHILE */
102
103     MX_BlueNRG_MS_Process();
104     /* USER CODE BEGIN 3 */
105 }
106 /* USER CODE END 3 */
107 }
108
109 /**
110  * @brief System Clock Configuration
111  * @retval None
112  */
113 void SystemClock_Config(void)
```