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Code Changes:

```
16    *****************************************************************************
17    */
18  /* USER CODE END Header */
19  /* Includes ------------------------------------------------------------------*/
20  #include "main.h"
21  #include "usb_device.h"
22  #include "string.h"
23
24  /* Private includes ----------------------------------------------------------*/
25  /* USER CODE BEGIN Includes */
26
27  /* USER CODE END Includes */
28
29  /* Private typedef -----------------------------------------------------------*/
30  /* USER CODE BEGIN PTD */
31
32  /* USER CODE END PTD */
33
34  /* Private define ------------------------------------------------------------*/
35  /* USER CODE BEGIN PD */
36
37  /* USER CODE END PD */
38
39  /* Private macro -------------------------------------------------------------*/
40  /* USER CODE BEGIN PM */
41
42  /* USER CODE END PM */
43
44  /* Private variables ---------------------------------------------------------*/
45  I2C_HandleTypeDef hi2c1;
46
47  SPI_HandleTypeDef hspi1;
48
49  UART_HandleTypeDef huart1;
50
```

```
/* USER CODE BEGIN WHILE */
while (1)
{
  /* USER CODE END WHILE */

  char msg[] = "Hellow world from Saad and Basil from STM32F3Discovery! \r\n";
  HAL_UART_Transmit(
    huart: &huart1,
    pData: (uint8_t *) msg,
    Size: strlen(msg),
    Timeout: HAL_MAX_DELAY
  );
  /* USER CODE BEGIN 3 */
}
/* USER CODE END 3 */
```

Terminal Changes:

```
Hellow world from Saad and Basil from STM32F3Discovery!
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```

Answer 'a': We placed HAL_UART_Transmit() function inside the while(1) loop to repeatedly see our output on the screen, if we place the function outside of the while loop then we would see the message once per startup. It would then enter an infinite while loop and do nothing.

Answer 'b': screen /dev/ttyACM0 11500 starts up the terminal where we can see our output. This command communicates with our STM32 microcontroller. 115200 is our baud rates (bits per second) for serial communication. If the baud rate doesn't match with the baud rate defined in STM32CubeMX then we would see gibberish or garbage values on our terminal.
ttyACM0 means using the STM32s USB serial connection, where ACM means Abstract Control Model. 0 signifies the port.

Github Link : https://github.com/0i0iSaad/my-project.git
Code file : https://github.com/0i0iSaad/my-project/blob/master/Lab_1/Hello_World/Core/Src/main.c