**Q1.**

\*\*  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
\* @file : main.c  
\* @author : Auto-generated by STM32CubeIDE  
\* @brief : Main program body  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
\* @attention  
\*  
\* <h2><center>&copy; Copyright (c) 2022 STMicroelectronics.  
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\*  
\* This software component is licensed by ST under BSD 3-Clause license,  
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\* opensource.org/licenses/BSD-3-Clause  
\*  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
\*/#include <stdint.h>  
#if !defined(\_\_SOFT\_FP\_\_) && defined(\_\_ARM\_FP)  
#warning "FPU is not initialized, but the project is compiling for an FPU. Please initialize the FPU before use."  
#endif

int main(void)  
{  
/\* USER CODE BEGIN 1 \*/

/\* USER CODE END 1 \*/

/\* MCU Configuration--------------------------------------------------------\*/

/\* Reset of all peripherals, Initializes the Flash interface and the Systick. \*/  
HAL\_Init();

/\* USER CODE BEGIN Init \*/

int i=0;  
char \*ptr;  
char str[] = "Hello World";

/\* USER CODE END Init \*/

/\* Configure the system clock \*/  
SystemClock\_Config();

/\* USER CODE BEGIN SysInit \*/

/\* USER CODE END SysInit \*/

/\* Initialize all configured peripherals \*/  
MX\_GPIO\_Init();  
MX\_DFSDM1\_Init();  
MX\_I2C2\_Init();  
MX\_QUADSPI\_Init();  
MX\_SPI3\_Init();  
MX\_USART1\_UART\_Init();  
MX\_USART3\_UART\_Init();  
MX\_USB\_OTG\_FS\_PCD\_Init();

/\* USER CODE BEGIN 2 \*/  
ptr = (char \*)0x20000100;

/\* USER CODE END 2 \*/

/\* Infinite loop \*/  
/\* USER CODE BEGIN WHILE \*/  
while (str[i] != 0)  
{  
/\* USER CODE END WHILE \*/

/\* USER CODE BEGIN 3 \*/  
\*ptr = str[i];  
ptr++;  
i++;  
}  
/\* USER CODE END 3 \*/  
}

**OUTPUT-**

**Graphical user interface, application

Description automatically generated**