```
//*****************************************************************************
//*****************************************************************************
//                                                                            **
//                        Łańcuchy znakowe - konwersje                        **
//      funkcjonalności:                                                      **
//                  - Zmiana liczby na format hexadecymalny                   **
//                  - Zmiana ciągu znaków w fromacie hexadecymalny na liczbę   **
//                  - Dołączanie jednego liczby hexadecymalnej do łańcucha znakowego**
//                                                                            **
//                                                                            **
//*****************************************************************************

void UIntToHexStr (unsigned int uiValue, char pcStr[])
{
  unsigned char ucHexChar;

  pcStr[10] = '\0';
  pcStr[1] = 'x';
  pcStr[0] = '0';
  for(ucHexChar = 4; 0 < ucHexChar ; ucHexChar--)
  {
    pcStr[6 - ucHexChar] = ((uiValue & (0xF << ((ucHexChar - 1) * 4))) >> ((ucHexChar - 1) * 4));
    if(9 >= pcStr[6 - ucHexChar])
    {
       pcStr[6 - ucHexChar] = pcStr[6 - ucHexChar] + 48;
    }
    else
    {
      pcStr[6 - ucHexChar] = pcStr[6 - ucHexChar] + 55;
    }
  }
}
```

```
enum Result { OK, ERROR };


enum Result eHexStringToUInt(char pcStr[],unsigned int *puiValue)
{
  unsigned char ucCharacterCounter;

  if(('0' == pcStr[0]) && ('x' == pcStr[1]) && ('\0' != pcStr[2]))
  {
    for(ucCharacterCounter = 2; pcStr[ucCharacterCounter]; ucCharacterCounter++)
    {
      if(('A' <= pcStr[ucCharacterCounter]) && ('F' >= pcStr[ucCharacterCounter]))
      {
        *puiValue = (*puiValue * 16) + (pcStr[ucCharacterCounter] - 55);
      }
      else if(('0' <= pcStr[ucCharacterCounter]) && ('9' >= pcStr[ucCharacterCounter]))
      {
        *puiValue = (*puiValue * 16) + (pcStr[ucCharacterCounter] - 48);
      }
      else
        return ERROR;
    }
    if(ucCharacterCounter > 6)
    {
      return ERROR;
    }
    else
    {
      return OK;
    }
  }
  else
  {
    return ERROR;
  }
}

void AppendUIntToString (unsigned int uiValue, char pcDestinationStr[])
{
  unsigned char ucCharacterCounter;

  for(ucCharacterCounter = 0; '\0' != pcDestinationStr[ucCharacterCounter]; ucCharacterCounter++) {}
  UIntToHexStr(uiValue, pcDestinationStr+ucCharacterCounter);
}
```