**PRACTICAL – 15**

|  |  |
| --- | --- |
|  | **Problem statement**  **Write a C program to generate in triple intermediate code for assignment statement** |

**SOLUTION:**

|  |
| --- |
| **CODE:**  #include <stdio.h>  #include <string.h>  typedef struct {      char op[10];      char arg1[10];      char arg2[10];      char result[10];  } Triple;  void generateTriple(char \**statement*, Triple \**triples*, int \**count*) {      char lhs[10], rhs[10];      sscanf(*statement*, "%s = %s", lhs, rhs);      strcpy(*triples*[\**count*].op, "=");      strcpy(*triples*[\**count*].arg1, rhs);      strcpy(*triples*[\**count*].arg2, "");      strcpy(*triples*[\**count*].result, lhs);      (\**count*)++;  }  void printTriples(Triple \**triples*, int *count*) {      for (int i = 0; i < *count*; i++) {          printf("(%d) (%s, %s, %s, %s)\n", i, *triples*[i].op, *triples*[i].arg1, *triples*[i].arg2, *triples*[i].result);      }  }  int main() {      char statement[50];      Triple triples[10];      int count = 0;      printf("Enter an assignment statement: ");      gets(statement);      generateTriple(statement, triples, &count);      printTriples(triples, count);      return 0;  }  **OUTPUT:** |