Program 2:

Implementation of Language recognizer for set of all strings ending with two symbols of

same type.

Method:

```c
void
main ()
{
  int state = 0, i = 0;
  char current, input[20];
  printf ("Enter input string \t :");
  scanf ("%s", input);
  while ((current = input[i++]) != '\0')
    {
      switch (state)
          {
          case 0:
            if (current == '0')
              state = 1;
            else if (current == '1')
              state = 2;
            else
              {
                printf ("Invalid token");
                exit (0);
              }
            break;
          case 1:
            if (current == '0')
              state = 3;
            else if (current == '1')
              state = 2;
            else
              {
                printf ("Invalid token");
                exit (0);
              }
            break;
          case 2:
            if (current == '0')
```

```c
              state = 1;
            else if (current == '1')
              state = 4;
            else
              {
                printf ("Invalid token");
                exit (0);
              }
          break;
        case 3:
          if (current == '0')
            state = 3;
    else if (current == '1')
              state = 2;
            else
              {
                printf ("Invalid token");
                exit (0);
              }
          break;
        case 4:
          if (current == '0')
            state = 1;
          else if (current == '1')
            state = 4;
          else
            {
              printf ("Invalid token");
              exit (0);
            }
          break;
        }
    }
  if (state == 3 || state == 4)
    printf ("\n\nString accepted\n\n");
  else
    printf ("\n\nString not accepted\n\n");
}
```