GRAPH(NUM)

NUMOFVERTEX <- 0

FOR I <- 0 to length[10]

FOR J <- 0 to length 10

ADJACENCYMATRIX[I][J] <- 0

ADD\_VERTEX(NUM)

NUMOFVERTEX = NUM

FOR I <- NUM to length NUMOFVERTEX

FOR J <- 0 to length NUMOFVERTEX

ADJACENCYMATRIX[I][J] <- 0

ADD\_EDGE(I, J)

ADJACENCYMATRIX[I][J] <- 1

ADJACENCYMATRIX[J][I] <- 1

PRINT

FOR I <- 0 to length[10]

FOR J <- 0 to length 10

PRINT ADJACENCYMATRIX[I][J]

DEPTH(V)

CREATE FILE NAMED ‘depth.txt’

FOR  I <- 0 to length[NUMOFVERTEX]

VISITED[I] <- 0

PUSH TO STACK(V)

VISITED[V] <- 1

WHILE STACK NOT EMPTY

OUTPUT V TO FILE

V <- STACK POP

FOR I <- 0 to length NUMOFVERTEX

IF NOT[VISITED[I]] AND ADJACENCYMATRIX[V][I] = 1

VISITED[I] = 1

PUSH TO STACK(I)

BREADTH(V)

CREATE FILE NAMED ‘breadth.txt’

FOR  I <- 0 to length[NUMOFVERTEX]

VISITED[I] <- 0

PUSH TO QUEUE(V)

VISITED[V] <- 1

WHILE QUEUE NOT EMPTY

OUTPUT V TO FILE

V <- QUEUE FRONT

FOR I <- 0 to length NUMOFVERTEX

IF NOT[VISITED[I]] AND ADJACENCYMATRIX[V][I] = 1

VISITED[I] = 1

PUSH TO QUEUE(I)