ASSEMBLLY CODE:

```
.MODEL SMALL
.STACK 100H
.DATA
    MSGA DB 'Enter Velocity: $'
    MSGB DB 'Enter Time: $'
    MSGC DB 'Distence: $'
    MSGD DB 13,10,'$'
    COUNT DB ?
    VELOCITY DW ?
    TIME DW ?
    DISTENCE DW ?
    TEMP DW ?

.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

RAND_IO:
    MOV COUNT,2
    LEA DX,MSGA                     ;Print 'Enter Velocity:'
    MOV AH,9
    INT 21H

    GET_INPUTS:
        MOV DX,0
        MOV BX,0                    ;Clear bx
        MOV AH,1
        INT 21H

        CMP AL,0DH
        JE END_INPUTS               ;If enter

        CONVERT_TO_NUM:
            AND AX,000FH            ;Use full 16 bits of AX
            MOV TEMP,AX
            MOV AX,10
            MUL BX
            MOV BX, AX
            ADD BX,TEMP

        MOV AH,1                    ;Input new digit
        INT 21H
        CMP AL,0DH
        JNE CONVERT_TO_NUM

        END_INPUTS:
            CMP COUNT,1
            JNE GET_V

            MOV TIME,BX             ;Get Time
            JMP GET_T

            GET_V:
                MOV VELOCITY,BX     ;Get Velocity
                LEA DX,MSGB         ;Print 'Enter Time:'
                MOV AH,9
                INT 21H

            GET_T:
                DEC COUNT
                CMP COUNT,0
                JNE GET_INPUTS
```

```
    GET_DISTANCE:
        MOV BX,TIME
        MOV AX,VELOCITY
        MUL BX                      ;AX = AX*BX
        MOV BX,2
        MUL BX
        MOV DISTENCE,AX             ;Get result in destence

    START_PRINT:
        LEA DX,MSGC                 ;Print Distence
        MOV AH,9
        INT 21H

        MOV AX,DISTENCE
        MOV CX,0
        MOV BX,10

        STOR_RESULTS:               ;stor each digits in stack
            XOR DX,DX
            DIV BX
            PUSH DX
            INC CX
            CMP AX,0
            JNE STOR_RESULTS

        PRINT_RESULTS:              ;print each digits from stack
            MOV AH,2
            POP DX
            ADD DL,48
            INT 21H
            LOOP PRINT_RESULTS

    NEW_INPUT:
        LEA DX,MSGD
        MOV AH,9
        INT 21H
        JMP RAND_IO

MAIN ENDP
    END MAIN
```