Programming Languages Round 1

In what language are the following Hello World programs/scripts written?

(1 point each)

1

```
main( ) {
  extrn a, b, c;
  putchar(a); putchar(b); putchar(c); putchar('!*n');
}
a 'hell';
b 'o, w';
c 'orld';
```

2

```
#include <stdio.h>
#include <stdlib.h>

int main(void)
{
  puts("Hello World!");
  return EXIT_SUCCESS;
}
```

3

```
<!-- Hello World -->

 <HEAD>
  <TITLE>Hello World!</TITLE>
 </HEAD>

 <BODY>
  Hello World!
 </BODY>
```

4

```
++++++++++[>+++++++>++++++++++>+++<<<-]>++.>+.+++++++
..+++.>++.<<+++++++++++++++.>.+++.------.--------.>+.
```

5

```
****************************
IDENTIFICATION DIVISION.
PROGRAM-ID. HELLO.
ENVIRONMENT DIVISION.
DATA DIVISION.
PROCEDURE DIVISION.
MAIN SECTION.
DISPLAY "Hello World!"
STOP RUN.
****************************
```

Programming Languages
Round 2 :

In what languages are the following “99 Bottles of Beer” programs /scripts written?

(1 point each)

1

```
bottles :: Int -> String
bottles n
  |n == 0 = "no more bottles"
  |n == 1 = "1 bottle"
  |n >  1 = show n ++ " bottles"

verse :: Int -> String
verse n
  |n == 0 = "No more bottles of beer on the wall, no more bottles of beer.\n"
          ++ "Go to the store and buy some more, 99 bottles of beer on the wall."
  |n>0    = bottles n ++ " of beer on the wall, " ++ bottles n ++ " of beer.\n"
          ++ "Take one down and pass it around, " ++ bottles (n-1)
          ++ " of beer on the wall.\n"

main = mapM (putStrLn . verse) [99,98..0]
```

2

```
10 REM 99 bottles of beer
20 FOR X=99 TO 1 STEP -1
30 PRINT X;"bottle";
40 IF X<>1 THEN PRINT "s";
50 PRINT " of beer on the wall,";X;"bottle";
60 IF X<>1 THEN PRINT "s";
70 PRINT " of beer"
80 PRINT "Take one down and pass it around,"
90 PRINT X-1;"bottle";
100 IF X<>1 THEN PRINT "s";
110 PRINT " of beer on the wall"
120 NEXT
```

3

```
(labels ((foo (x)
           (and (<= 0 x) (cons x (foo (1- x))))))
  (format t (format nil
    "~~{~~&~~@(~~&~~R ~A ~A!~~)~~:*~~&~~@(~~R~0@*~A!~~)~~&~~@(~2@*~A!~~)~~&~~@(~~[~A~~:;~~:*~~R~~:*~~] ~0@*~A!~~)~~}"
    "bottles of beer"
    "on the wall"
    "take one down, pass it around"
    "no more"
  )
  (foo 99))
)
```

4

```
''=~(       '(?{'       .('`'       |'%')       .('['       ^'-')
.('`'       |'!')       .('`'       |',')       .'"'.       '\\$'
.'=='       .('['       ^'+')       .('`'       |'/')       .('['
^'+')       .'||'       .(';'       &'=')       .(';'       &'=')
.';-'       .'-'.       '\\$'       .'=;'       .('['       ^'(')
.('['       ^'.')       .('`'       |'"')       .('!'       ^'+')
  .'_\\{'     .'(\\$'     .';=('.     '\\$=|'     ."\|".(     '`'^'.'
).(('`')|   '/').').'   .'\\"'.+(   '{'^'[').   ('`'|'"')   .('`'|'/'
).('['^'/').('['^'/').  ('`'|',').(  '`'|('%')).  '\\".\\"'.(  '['^('(')).
'\\"'.('['^  '#').'!!--'  .'\\$=.\\"'  .('{'^'[').  ('`'|'/').(  '`'|"\&").(
'{'^"\[").(  '`'|"\"").(  '`'|"\%").(  '`'|"\%").(  '['^(')')).  '\\").\\"'.
('{'^'[').(  '`'|"\/").(  '`'|"\.").(  '{'^"\[").(  '['^"\/").(  '`'|"\(").(
'`'|"\%").(  '{'^"\[").(  '['^"\,").(  '`'|"\!").(  '`'|"\,").(  '`'|(',')).
'\\"\\}'.+(  '['^"\+").(  '['^"\)").(  '`'|"\)").(  '`'|"\.").(  '['^('/')).
'+_,\\",'.(  '{'^('[')).  ('\\$;!').(  '!'^"\+").(  '{'^"\/").(  '`'|"\!").(
'`'|"\+").(  '`'|"\%").(  '{'^"\[").(  '`'|"\/").(  '`'|"\.").(  '`'|"\%").(
'{'^"\[").(  '`'|"\$").(  '`'|"\/").(  '['^"\,").(  '`'|('.')).  ',',.(('{')^
'[').("\[^   '+').("\`"|  '!').("\[^   '(').("\[^   '(').("\{^   '[').("\`"|
')').("\[^   '/').("\{^   '[').("\`"|  '!').("\[^   ')').("\`"|  '/').("\[^
'.').("\`"|  '.').("\`"|  '$').",\".(  '!'^('+')).  '\\",_,\\"'  .'!'.("\!"^
'+').("\!"^  '+').'\\"'.  ('['^',').(  '`'|"\(").(  '`'|"\)").(  '`'|"\,").(
'`'|('%')).  '++\\$="})'  );$:=('.')^  '~';$~='@'|  '(';$^=')'^  '[';$/='`';
```