

(9)

(a)

```
      :  
a = 3.21;  
      :  
a = "good morning!"  
      :
```

If the above program statements can be successfully executed, which kind of type binding (static or dynamic) is used in the language that is used in the above statements?

(b)

```
      :  
a = 3.21;  
      :  
a = "good morning!";  
      :
```

If the above program statements cannot be transferred to an executable file, which kind of type binding (static or dynamic) is used in the language that is used in the above statements?

Ans.

(11)

What follows is the content of a C program **example.c**.

```
#include <stdio.h>          /* location 11*/  
int bar(int x)  
{ int a, b, c;             /* location 1*/  
  c=x;                     /* location 2*/  
  b=x*9;                   /* location 3*/  
  a=foo();                 /* location 4*/  
  return a;                /* location 5*/  
}  
int foo()  
{int a=1, b=2, c;         /* location 6*/  
  c=a+b;                   /* location 7*/  
  return c;                /* location 8*/  
}  
int main()  
{int a=1, b=2, c=3;      /*location 9*/  
  return bar(a);          /*location 10*/  
}
```

Assume the executable file of the program `example.c` is called `example.exe`. (a) Which program handles the statement at location 11 in file `example.c`? (b) Which program handles the statement at location 2 in file `example.c` to generate corresponding machine code in `example.exe`?

Ans.