C Formatted Output Questions

Sayak Haldar

IIEST, Shibpur

1) What is the output of this C code?

```
1.  #include <stdio.h>
2.  int main()
3.  {
4.      int i = 10, j = 2;
5.      printf("%d\n", printf("%d %d ", i, j));
6.      return 0;
7.  }
```

a) Compile time error
b) 10 2 4
c) 10 2 2
d) 10 2 5

2) What is the output of this C code?

```
1.  #include <stdio.h>
2.  int main()
3.  {
4.      int i = 10, j = 3;
5.      printf("%d %d %d", i, j);
6.      return 0;
7.  }
```

a) Compile time error
b) 10 3
c) 10 3 some garbage value
d) Undefined behaviour

3)What is the output of this C code?

```
1.  #include <stdio.h>
2.  int main()
3.  {
```

```
4.      int i = 10, j = 3, k = 3;
5.      printf("%d %d ", i, j, k);
6.      return 0;
7.  }
```

a) Compile time error
b) 10 3 3
c) 10 3
d) 10 3 somegarbage value

4) What is the output of this C code?

```
1.  #include <stdio.h>
2.  int main()
3.  {
4.      char *s = "myworld";
5.      int i = 9;
6.      printf("%*s", i, s);
7.      return 0;
8.  }
```

a) myworld
b) myworld(note: spaces to the left of myworld)
c) myworld (note:followed by two spaces after myworld)
d) Undefined

5) What does this statement printf(“%10s”, state); means?

a) 10 spaces before the string state is printed
b) Print empty spaces if the string state is less than 10 characters
c) Print the last 10 characters of the string
d) None of the mentioned

6) What are the Properties of first argument of a printf functions?

a) It is defined by user
b) It keeps the record of the types of arguments that will follow
c) There may not be first argument
d) None of the mentioned

7) What is the output of this C code?

```
1.  #include <stdio.h>
2.  int main(int argc, char **argv)
3.  {
4.      char *s = "myworld";
5.      int i = 3;
6.      printf("%10.*s", i, s);
7.      return 0;
8.  }
```

a) myw
b) myworld(note:3 spaces before myworld)
c) myworld (note:3 spaces after myworld)
d) myw(note:7 spaces before myworld)

8)What is the difference between %e and %g ?

a) %e output formatting depends on the argument and %g always formats in the format [-]m.dddddd or [-]m.ddddd[+|-]xx where no.of ds are optional.
b) %e always formats in the format [-]m.dddddd or [-]m.ddddd[+|-]xx where no.of ds are optional and output formatting depends on the argument.
c) No differences
d) Depends on the standard

9) Escape sequences are prefixed with

a) %
b) /
c) ”
d) None of the mentioned

10) What is the purpose of sprintf?

a) It prints the data into stdout
b) It writes the formatted data into a string
c) It writes the formatted data into a file
d) Both a and c

11) The syntax to print a % using printf statement can be done by.

a) %

b) %

c) ‘%’

d) %%

12)What would be the output(s) of the following code?

```
#include<stdio.h>
int main()
{
        int a,b;
        float c,d;
        a = 15;
        b = a / 2;
        printf("%d\n",b);
        printf("%3d\n",b);
        printf("%03d\n",b);
        c = 15.3;
        d = c / 3;
        printf("%3.2f\n",d);
        return 0;
  }
```

13) Write the meaning of the following things:

- %d
- %6d
- %f
- %4f
- %.4f
- %3.2f

14) Write the output(s) of the following code:

```
#include<stdio.h>
int main()
{
    printf("The color: %s\n", "blue");
    printf("First number: %d\n", 12345);
    printf("Second number: %04d\n", 25);
    printf("Third number: %i\n", 1234);
    printf("Float number: %3.2f\n", 3.14159);
    printf("Hexadecimal: %x\n", 255);
    printf("Octal: %o\n", 255);
    printf("Unsigned value: %u\n", 150);
    printf("Just print the percentage sign %%\n", 10);
    return 0;
}
```

15) Write the output(s) of the following code?

```
#include<stdio.h>
int main()
{
	printf(":%s:\n", "Hello, world!");
	printf(":%15s:\n", "Hello, world!");
	printf(":%.10s:\n", "Hello, world!");
	printf(":%-10s:\n", "Hello, world!");
	printf(":%-15s:\n", "Hello, world!");
	printf(":%.15s:\n", "Hello, world!");
	printf(":%15.10s:\n", "Hello, world!");
	printf(":%-15.10s:\n", "Hello, world!");
}
```