

Started on Tuesday, 26 April 2022, 3:00 PM

State Finished

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Time taken 13 mins 38 secs

Given:

```
3. public class Tenor extends Singer {  
4.     public static String sing() { return "fa"; }  
5.     public static void main(String[] args) {  
6.         Tenor t = new Tenor();  
7.         Singer s = new Tenor();  
8.         System.out.println(t.sing() + " " + s.sing());  
9.     }  
10. }  
  
11. class Singer { public static String sing() { return "la"; } }
```

What is the result?

Select one:

- ☒ **a. fa la**
- ☐ **b. Compilation fails**
- ☐ **c. An exception is thrown at runtime**
- ☐ **d. la la**
- ☐ **e. fa fa**

Given:

```
public abstract interface Frobnicate { public void twiddle(String s); }
```

Which is a correct class? (Choose all that apply.)

Select one or more:

☒ **a. public class Frob implements Frobnicate {
public void twiddle(String i) { }
public void twiddle(Integer s) { }
}**

☐ **b. public class Frob implements Frobnicate {
public void twiddle(Integer i) { }
}**

☐ **c. public class Frob extends Frobnicate {
public void twiddle(Integer i) { }
}**

☐ **d. public abstract class Frob implements Frobnicate { }**

☐ **e. public abstract class Frob implements Frobnicate {
public abstract void twiddle(String s) { }
}**

Given:

```
class Top {  
public Top(String s) { System.out.print("B"); }  
}  
  
public class Bottom2 extends Top {  
public Bottom2(String s) { System.out.print("D"); }  
  
public static void main(String [] args) {  
new Bottom2("C");  
System.out.println(" ");  
}}}
```

What is the result?

Select one:

- ☐ a. **Compilation fails**
- ☐ b. **DB**
- ☐ c. **DBC**
- ☒ d. **BD**
- ☐ e. **BDC**

Output of following C program?

```
#include <stdio.h>

int f1() { printf ("hello"); return 1;}

int f2() { printf ("welcome"); return 1;}

int main()

{

    int p = f1() + f2();

    return 0;

}
```

Select one:

- ☐ a. **welcomehello**
- ☐ b. **Compiler Error**
- ☐ c. **hellowelcome2**
- ☐ d. **Compiler Dependent**
- ☒ e. **hellowelcome**

Given:

```
3. class Alpha {
4. static String s = " ";
5. protected Alpha() { s += "alpha "; }
6. }
```

```
7. class SubAlpha extends Alpha {  
8. private SubAlpha() { s += "sub "; }  
9. }  
10. public class SubSubAlpha extends Alpha {  
11. private SubSubAlpha() { s += "subsub "; }  
12. public static void main(String[] args) {  
13. new SubSubAlpha();  
14. System.out.println(s);  
15. }  
16. }
```

What is the result?

Select one:

- ☐ a. **Compilation fails**
- ☒ b. **alpha sub subsub**
- ☐ c. **sub subsub**
- ☐ d. **alpha subsub**
- ☐ e. **subsub**
- ☐ f. **An exception is thrown at runtime**

Given:

```
class Clidder {  
private final void flipper() { System.out.println("Clidder"); }  
}  
  
public class Clidlet extends Clidder {  
public final void flipper() { System.out.println("Clidlet"); }  
public static void main(String [] args) {  
new Clidlet().flipper();  
}}}
```

What is the result?

Select one:

- ☐ a. Clidlet Clidder
- ☐ b. Compilation fails
- ☐ c. Clidder Clidlet
- ☒ d. Clidlet
- ☐ e. Clidder

Predict the output of the following program:

```
#include <stdio.h>

int main()
{
    char str[] = "%d %c", arr[] = "GreatQueue";
    printf(str, 0[arr], 2[arr + 3]);
    return 0;
}
```

Select one:

- ☒ a. 71 Q
- ☐ b. G Q
- ☐ c. 71 81
- ☐ d. Prints Nothing and Results in Segmentation fault
- ☐ e. Compile-time error

Predict the output of following C program

```
#include <stdio.h>

int main()
{
    char a = '\012';
```

```
printf("%d", a);  
return 0;  
}
```

Select one:

- ☒ **a. 10**
- ☐ **b. Empty**
- ☐ **c. Compiler Error**
- ☐ **d. 12**

```
#include <stdio.h>  
int main()  
{  
    if (sizeof(int) > -1)  
        printf("Yes");  
    else  
        printf("No");  
    return 0;  
}
```

Select one:

- ☐ **a. Yes**
- ☐ **b. Runtime Error**
- ☒ **c. No**
- ☐ **d. Compiler Error**

Predict the output of following C program, assume that a character takes 1 byte and pointer takes 4 bytes.

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

```
char *str1 = "helloworld";  
  
char str2[] = "helloworld";  
  
char *str3='K';  
  
printf("sizeof(str1) = %d, sizeof(str2) = %d, sizeof(str3) = %d ", sizeof(str1), sizeof(str2),sizeof(str3));  
  
return 0;  
  
}
```

Select one:

- ☐ a. **sizeof(str1) = 11, sizeof(str2) = 4, sizeof(str3) = 4**
- ☐ b. **sizeof(str1) = 4, sizeof(str2) = 4, sizeof(str3) = 1**
- ☒ c. **sizeof(str1) = 4, sizeof(str2) = 11, sizeof(str3) = 4**
- ☐ d. **sizeof(str1) = 11, sizeof(str2) = 11, sizeof(str3) = 1**