

1. What is the output of the following code piece?

```
int i;
for(i=9;i<24;i+=3){
    printf("%2d",i);
    if(!(i%18))
        printf("\n");
}
```

a) 912151821 b) 9121518
2124 c) 9121518
21
d) 9 **e) 9121518** f) 9
1215 21 1215
1821 182124

2. What is the value of i right after exiting the loop?

```
int i=0;
for(;i<2;i*=2)
    switch(i){
        case 0: --i;
        case 1: i--; break;
        default: i*=-1;
    }
```

a) 4 **b) 8** c) -2
d) 0 e) -1 f) -4

3. What is the output of the following code piece?

```
int i=1,k;
for(k=8;i;i++){
    if(i>k) break;
    if(--k<3) continue;
    printf("%d",k);
}
```

a) 1234 b) 876543 c) 12345
d) 7654 e) 76543 f) 123

4. What is the output of the following program?

```
int foo(int i){
    for(;i%2;) i--;
    return i; }
int main(void){ int i;
    for(i=7;i>0;i--)
        printf("%d",foo(i));
    return 0;
}
```

a) 6644220 b) 6420 c) 7654321
d) 6040200 e) 7531 f) 75310

5. What is the final value of a after the following code piece is executed?

```
int a=4;
a+=(-a * a++ +(a>>1));
```

a) 22 b) 16 c) 18
d) 15 e) 12 **f) 14**

6. What is the output of the following program?

```
int foo(int a){
    printf("%d ", a++);
    return ++a; }
int main(){ int b=1;
    b=foo(b); foo(b);
    foo(1+foo(b));
    return 0;
}
```

a) 2 3 3 5 b) 1 3 5 8 **c) 1 3 3 6**
d) 2 4 4 7 e) 2 4 6 9 f) 1 2 2 4

1	2	3	4	5	6
e	b	d	a	f	c

- | | | | | | |
|----------|----------|----------|----------|----------|----------|
| 7 | 8 | 9 | 10 | 11 | 12 |
| b | a | d | e | f | c |