Important Questions with answer

Question ①

```
void main()
{
    int a[7] = {10, 11, -1, 56, 67, 5, 4};
    int *P, *q;
    P = a;
    printf(" %d \n", *P);
    printf(" %d %d %d\n", (*P)++, *P++, *++P);
    q = P + 3;
    printf(" %d ", *q - 3);
    printf(" %d", *--P + 5);
    printf(" %d", *P + *q);
}
```
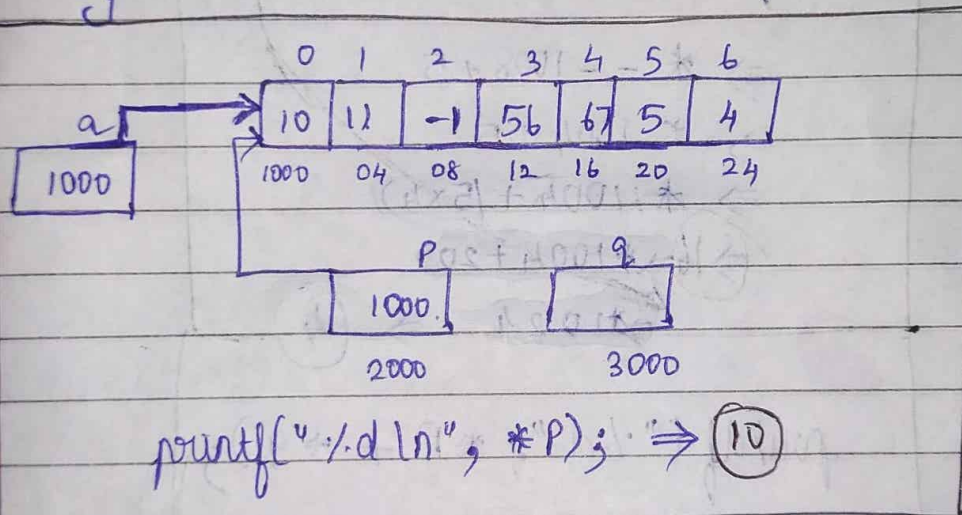

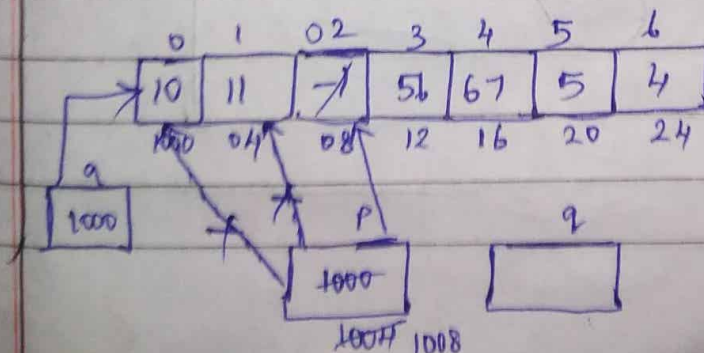|	0	1	2	3	4	5	6
	10	11	-1	56	67	5	4

a → 1000

1000   04   08   12   16   20   24

P as + 1000 + 2

1000		

2000   3000

printf(" %d \n", *P); ⟹ (10)

---

printf(" %d %d %d\n", (*P)++, *P++, *++P);

right to left → ③ ② ①

(-1)   (11)   (11)

	0	1	2	3	4	5	6
	10	11	-1	56	67	5	4

1000 04   08   12   16   20   24

a → 1000

P

1000

1004 1008

q

* ++P ⟹ * 1004 ⟹ (11)

*P++ ⟹ * 1004 ⟹ (11)

(*P)++ ⟹ -1 ++ ⟹ (-1)

$$q = P + 3;$$
$$= 1008 + (3 \times 4)$$
$$\Rightarrow 1008 + 12$$
$$q \Rightarrow 1020$$

0	1	2	3	4	5	6
10	11	1	56	67	5	4

1000   1004   1008   1012   1016   1020   1024

q
1000

P
1008
2000   (1004)

q
1020
3000

```
printf(" %d", *q -3);
```
$$\Rightarrow *q -3 \Rightarrow 5-3 \Rightarrow (2)$$
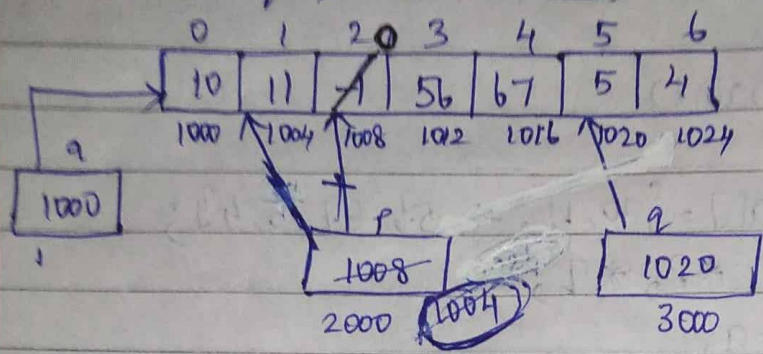
```
printf(" %d", * --P +5);
```
$$\Rightarrow * --1008 +5$$
$$\Rightarrow * 1004 +5$$
$$\Rightarrow 11 +5$$
$$\Rightarrow (16)$$

```
printf(" %d", *P + *q);
```
$$\Rightarrow *P + *q$$
$$\Rightarrow 11 + 5$$
$$\Rightarrow (16)$$

Question ②

```
void main ()
{
    int a[] = {10, 11, -1, 56, 67, 5, 4};
    int *P, *q;
    P = a;
    q = &a[0] + 3;                          ( 12   11 . 11 )
    printf (" %d %d %d ", (*P)++, (*P)++,
                                    *(++P));

    printf (" %d ", *P);            ⑬
    printf (" %d ", (*P)++);        ⑬
    printf (" %d ", (*P)++);        ⑭
    q--;
    printf (" %d ", (*(q+2))--);  ⑥⑦   printf("%d", *q)   ⊝①
    printf (" %d ", *(P+2) - 2);  ⑤④
    printf (" %d ", *(P++ -2) -1);  ⊝①
```
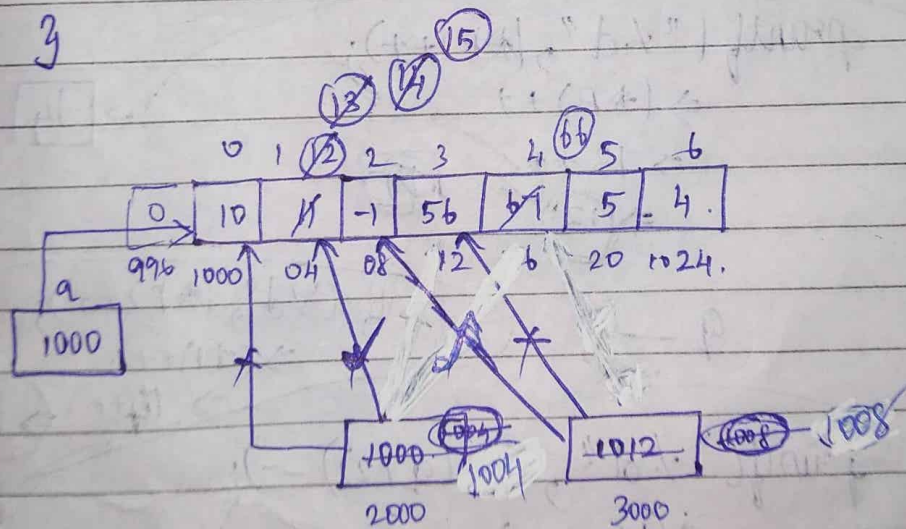
3


```
q = &a[0] + 3.
⇒ 1000 + 3.
⇒ 1000 + (3×4)  →  1000 + 12
    q ⇒ 1012
```

printf(" %d %d %d ", (*P)++ , (*P)++ , *(++P));

right to left.

①	②
⇒ *(++P) ⇒ *(1+1000) ⇒ *(1×4)+1000 ⇒ *1004 ⇒ ⑪	⇒(*P)++ ⇒ 11++ = ⎣12⎤ ⇒ ⑪

③	
⇒ (*P)++ ⇒ 12++ ⎣13⎦ ⇒ ⑫	output ⇒ 12 11 11

printf(" %d ", *P); = ⑬

printf(" %d ", (*P)++);
  ⇒ (*P)++
  ⇒ 13++
  ⇒ ⑬   → ⎣14⎦

q--;

printf(" %d ", (*P)++);
  ⇒ (*P)++
  ⇒ 14++   → 14   → ⎣15⎦

printf(" %d ", (*(q+2))--);
  ⇒ (*(q+2))--
  ⇒ (*(1008+2))--
  ⇒ (*1016)--
  ⇒ 67--
  ⇒ 67

$printf("\%d", ++); \Rightarrow$

$printf(" \%d", *(P+2)-2);$

$\Rightarrow (*(P+2)-2);$

$\Rightarrow *(1004+2)-2$

$\Rightarrow *1012-2$

$\Rightarrow 56-2$

$\Rightarrow (54)$

P | 1004 |

$printf(" \%d", *(P++ -2)-1);$

$\Rightarrow *(P++ -2)-1$

$\Rightarrow (*(1012+1)-2)-1$

$\Rightarrow *(1012 - 2)-1$

$\Rightarrow *(1012 -(2\times4))-1$

$\Rightarrow *(1012 - 8)-1$

$\Rightarrow (*(1004))-1$

$\Rightarrow (14-1) \Rightarrow (13)$

$\Rightarrow *(1020)-1$

$\Rightarrow$

P | 1016. |

$\Rightarrow *(P++ -2)-1$

$\Rightarrow *(1004 - 2\times4)-1$

$\Rightarrow *(1004-8)-1$

$\Rightarrow *(996)-1$

$\Rightarrow 0-1$

$\Rightarrow (-1)$

1016. P | 1008. |

QUESTION 1:

```c
#include <stdio.h>
#include <stdlib.h>
/** 1 - POINTER IMPORTANT QUESTIONS **/
int main()
{
    int a[]={10,11,-1,56,67,5,4};
    int *p,*q;
    p=a;
    printf("%d\n",*p);
    printf("%d %d %d\n",(*p)++,*p++,*++p);
    q=p+3;
    printf("%d\n",*q-3);
    printf("%d\n",*--p+5);
    printf("%d\n",*p+*q);
    getch();
}
```

```
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10
-1 11 11
2
16
16
```

Question 2:

```c
1    #include <stdio.h>
2    #include <stdlib.h>
3    /** 2 - POINTER IMPORTANT QUESTIONS **/
4    int main()
5    {
6        int a[]={10,11,-1,56,67,5,4};
7        int *p,*q;
8        p=a;
9        q=&a[0]+3;
10       printf("%d %d %d\n",(*p)++,(*p)++,*(++p));
11       printf("%d\n",*p);
12       printf("%d\n",(*p)++);
13       printf("%d\n",(*p)++);
14       q--;
15       printf("%d\n",(*(q+2))--);
16       printf("%d\n",*q);
17       printf("%d\n",*(p+2)-2);
18       printf("%d\n",*(p++-2)-1);
19       getch();
20   }
21
```

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```
12 11 11
13
13
14
67
-1
54
-1
```