

1. Write down the output of the following C program

```
#include <stdio.h>
void mystery(int *);
int main()
{
int a=345,b=0,c=24;
int *p=&a,*q=&b,**r=&p;
*q=100;
a=200;
c=*p + *q;
printf("x=%d y=%d z=%d\n",*p,b,c);
mystery(*r);
printf("w=%d\n",a-b);
return 0;
}
void mystery(int *p)
{
*p=700;
}
-----
x=      y=      z=
w=
-----
```

2. The following C statements are part of a C program. Write down the output.

```
i. int x[7]={2,4,1,5};
int *p=x+3;
printf("a=%d b=%d c=%d\n",*(2+x),*(p-2),*(p+2)+3);
p -=2;
printf("d=%d e=%d f=%d\n",*x-2,*(p+1),p[2]);
```

```
-----
a=      b=      c=
d=      e=      f=
-----
```

```
ii. char *p="A for Apple";
char *q="B for Ball"+2;
printf("s=%s\n",p+2);
printf("x=%c y=%c\n",q[5],q[-2]);
```

```
-----
s=
x=      y=
-----
```

```

iii. int a[3][4]={{2,1,3,5},{7,9,6,8},{0,11,15,12}};
    int *p,*q;
    p=*(a+1);
    q=&a[0][2];
    printf("x=%d y=%d\n",p[1],q[5]);
    printf("u=%d v=%d\n",*(*(a+2)+1),*(a[0]+2));
    printf("r=%d s=%d\n",*(*(a+2)-2),*(a+1)+4);

```

```

-----
x=    y=
u=    v=
r=    s=
-----

```

3. The output of the program is 5 4 5 2 5 10. Complete the program using a single function.

```

#include <stdio.h>
/*write the function prototype here*/

int main()
{
int a[5]={5,4,3,2,1},n=5,m=0,i;
/*call the function here*/

for(i=0;i<n;i++)
{
    printf("%d ",a[i]);
}
printf("%d\n",m);
return 0;
}
/*write the function here*/

```