

1) Complete the necessary parts of the following program.

```
#include <stdafx.h>
```

```
_____ /* write function prototype */
```

```
void main()
```

```
{
```

```
_____ /* call function Calculate */
```

```
}
```

```
void Calculate( void )
```

```
{
```

```
float x,y;
```

```
int loop;
```

```
for ( loop = 1; loop <= 5; loop++ )
```

```
{
```

```
printf( "Enter a floating point value: " );
```

```
_____ /* read x value */
```

```
y = ( x * 0.5 );
```

```
_____ /* print x and y */
```

```
}  
}
```

Soln:

```
#include "stdafx.h"
```

```
void Calculate(void);
```

```
void main()
```

```
{
```

```
    Calculate();
```

```
}
```

```
void Calculate(void)
```

```
{
```

```
    float x,y;
```

```
    int loop;
```

```
    for (loop = 1; loop <= 5; loop++)
```

```
    {
```

```
        printf_s("Enter a floating point value: ");
```

```
        scanf_s("%f", &x);
```

```
        y = (x * 0.5);
```

```
        printf_s("x=%.2f y=%.2f\n", x, y);
```

```
    }
```

```
}
```

2) Rewrite the following program with a function:

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
    int sum = 0;
```

```
    int number;
```

```
    for ( number = 2; number <= 100; number += 2 )
```

```
    {
```

```
        sum += number;
```

```
    }
```

Write this statement in a function

```
    printf( "Sum is %d\n", sum );
```

```
}
```

Soln:

```
int sum = 0;
```

```
int summation(int number)
```

```
{
```

```
    return sum + number;
```

```
}
```

```
void main()
```

```
{
```

```
    int number;
```

```
    for (number = 2; number <= 6; number += 2)
```

```
    {
```

```
        sum=summation(number);
```

```
    }
```

```
    printf_s("Sum is %d\n", sum);
```

```
}
```

3) What values are printed out by the following program?

```
#include "stdafx.h"
int func(int x, int y)
{
    x = 2 * x + y;
    return x;
}
void main()
{
    int x = 2, y = 5;
    y = func(y, x);
    x = func(y, x);
    printf_s("x=%d y=%d\n", x, y);
}
```

Output: x=26 y=12

4) What values are printed out by the following program?

```
#include "stdafx.h"
int fun(int i)
{
    return i++;
}
void main()
{
    int i;
    i = fun(5);
    printf_s("i=%d \n", --i);
}
```

Output: i=4