



## **ASSIGNMENT**

1. Write a function to calculate sum and product into a single function (using pointer).
  - a. Using global variables (for result)
  - b. Without using global variables
2. Write a function to swap two numbers (using pointer)
3. Classwork on Arrays

## **TWISTERS**

```
1. int main(void)
{
    int a = 10;
    int *ptr = &a;
    printf(" %d %d ", a, ++*ptr);
    printf(" %d %d ", a, *ptr++);
    return 0;
}
```

- A. 11 11 11 11
- B. 11 11 12 12
- C. Compile time error
- D. Run time error

**Answer: A**



2. #include<stdio.h>

```
int print_size(int a[])
{
    printf("%d, %d, ", sizeof(a) , sizeof( a[3] ) );
    return 0;
}
```

```
int main(void)
{
    int a[] = {1,2,3};
    printf("%d, %d, ",sizeof(a) , sizeof( a[-1] ) );
    print_size(a);
}
```

A. compile time error

B. 12 , 4 , 12 , 4

C. 12 , 4 , 4 , 4

D. 12 , 2 , 12 , 8

**Answer: C**



3. #include <stdio.h>

```
void callbyAddress1(int *x)
{
    x=x+10;
}
```

```
void callbyAddress2(int *x)
{
    *x=*x+10;
}
```

```
int main(void)
{
    int a=10;
    printf(" %d ",a);
    callbyAddress1(&a);
    printf(" %d ",a);
    callbyAddress2(&a);
    printf(" %d ",a);
    callbyAddress1(&a);
    printf(" %d ",a);
    callbyAddress2(&a);
    printf(" %d ",a);
    return 0;
}
```

- A. 10 10 20 20 30
- B. 10 10 10 10 10
- C. 10 20 30 40 50
- D. compile time error

**Answer: A**



**4. #include<stdio.h>**

**int main( void )**

**{**

**const int a = 4;**

**int \* const ptr = &a;**

**\*ptr = update(a);**

**printf("a = %d ptr = %d ", a,--\*ptr);**

**printf("a = %d ptr = %d ", a,++\*ptr);**

**printf("a = %d ptr = %d ", a,--\*ptr);**

**return 0;**

**}**

**int update(int a)**

**{**

**int value=(a+a\*a+a);**

**return value;**

**}**

**A. a = 23 ptr = 23 a=24 ptr =24 a=23 ptr =23**

**B. a = 63 ptr = 63 a = 64 ptr = 64 a = 63 ptr = 63**

**C. a = 24 ptr = 24 a = 25 ptr = 25 a = 24 ptr = 24**

**D. a = 64 ptr = 64 a = 65 ptr = 65 a = 64 ptr = 64**

**E. Compile time error**

**Answer: A**