

Question 1 (18 POINTS):

Find the output of the following programs:

I)

```
#include<stdio.h>
void strange(int a[],int *b,int *c,int *d);

int main(void){
    int x[6]={5,2,1},i;
    strange(x,&x[0],&x[1],&x[2]);
    for(i = 0; i < 6; i++)
        printf("%d\t",x[i]);
    return 0;}

void strange(int a[],int *b,int *c,int *d){
    a[*b]=*b;
    *b=*b+1;
    a[5-*c]=*c;
    *c=*c+1;
    a[3+*d]=*d;
    *d=*d+1;}
```

OUTPUT

6 3 2 2 1 5

II)

```
#include<stdio.h>
int rec (int x[], int min, int max);

int main() {
    int x[]={10,1,16,4,11,3,15,8,17};
    printf("%d", rec(x,0,8));
    return 0;}

int rec (int x[], int min, int max){
    if(min > max )
        return x[min];
    if (x[min] > x[max])
        printf("%d\n",x[min]);
    else
        printf("%d\n",x[max]);
    return rec(x, min+1, max-1);}
```

OUTPUT

17
8
16
4
11
3

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III)

```
#include<stdio.h>

int main(void){
    int a[6], b[6], j;
    for(j = 0; j < 6; j += 2)
        scanf("%d",&a[j]);
    for(j = 5; j >= 1; j -= 2)
        scanf("%d",&a[j]);
    printf("%d %d %d\n",a[1],a[3],a[4]);
    for(j = 0; j < 6; j += 2)
        if (a[j] > 4){
            a[j] -= 2;
            b[j] = a[j] + 4;}
        else{
            a[j] -= 4;
            b[j] = a[j] + 3;}
    printf("%d %d %d\n",b[0],b[2],b[4]);
    return 0;}
```

The Input for this Program is:

4 2 7 11 -3 6

OUTPUT

6	-3	7
3	1	9