

### **Question 1**

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

```
int main()
```

```
{
```

```
    int size;
```

```
    printf("How many numbers do you want to insert \n");
```

```
    scanf("%d",&size);
```

```
    int array[size];
```

```
    printf(" Enter the numbers: \n");
```

```
    for(int i=0; i<size; i++) {
```

```
        scanf("%d", &array[i]);
```

```
    }
```

```
    int count=0;
```

```
    for(int i=0;i<size;i++)
```

```
    {
```

```
        while(array[i]%10==0)
```

```
        {
```

```
            count++;
```

```
            array[i]/=10;
```

```
        }
```

```
    }
```

```
    //for(int i=0;i<4;i++)
```

```
    //printf(" %d ",array[i]);
```

```
int final=1;

for(int i=0;i<size;i++)

    final*=array[i];


printf("Final: %d",final);

printf("%0*d ", count, 0);


return 0;
}
```

## **Question 2**

```
#include <stdio.h>


int top=-1, size=5, stack[5], maxStack[5],maxTop=-1;


void push(int x)
{
    if(top == size-1 )
    {
        printf("Overflow");
        return;
    }

    stack[++top] = x;
```

```
if(maxTop== -1)
{
    maxStack[++maxTop]=x;
    return;
}
```

```
if(stack[top]<=maxStack[maxTop] )
    maxStack[++maxTop]=stack[top];
else
    maxStack[top]=maxStack[maxTop++];
```

```
}
```

```
int pop()
{
    if(maxTop == -1)
    {
        printf("Underflow");
        return -1;
    }
    int x = stack[top];
    top--;
    return x;
}
```

```
void display()
{
```

```
if(top == -1 || maxTop==-1)
{
printf("No element to display");
return;
}
```

```
for (int i = top; i>=0 ; i--)
{
printf("-----\n");
printf("| %d |",stack[i]);
}
```

```
printf("-----\n");
```

```
for (int j = top; j>=0 ; j--)
{
printf("-----\n");
printf("| %d |",maxStack[j]);
}
```

```
printf("-----\n");
```

```
}
```

```
int main()
```

```
{
```

```
    push(18);  
    push(22);  
    push(14);  
    push(16);  
    push(15);  
  
    display();  
  
    return 0;  
}
```