

Session 5 exercise

1. Write a program in C to copy the elements one array into another array.

Input the number of elements to be stored in the array :3

Input 3 elements in the array :

element - 0 : 15

element - 1 : 10

element - 2 : 12

2. Write a C program to print two dimensional array as a snake arr1[3][3]={ '1', '2', '3',

'4', '5', '6',

'7', '8', '9'

Expected output : 1 2 3 6 5 4 7 8 9.

3. What will happen if in a C program you assign a value to an array element whose subscript exceeds the size of array?

A- The element will be set to 0.

B- The compiler would report an error.

C- The program may crash if some important data gets overwritten.

D- The array size would appropriately grow.

4. What will be output if you will execute following c code?

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

```
void main()
{
    char arr[7]="Network";
    printf("%s",arr);
}
```

A- Network

B- N

C- network

D- Garbage value

E- Compiler error

5. What will be output if you will execute following c code?

```
#include<stdio.h>
void main()
{
    char arr[11]="The African Queen";
    printf("%s",arr)
}
```

A- The African Queen

B- The

- C- Queen
- D- null
- E- Compilation error

6. What will be output if you will execute following c code?

```
#include<stdio.h>
void main()
{
    char arr[20]="MysticRiver";
    printf("%d",sizeof(arr));
}
```

- A- 20
- B- 11
- C- 12
- D- 22
- E- 24

7. What will be output if you will execute following c code?

```
#include<stdio.h>
void main()
{
    int const SIZE=5;
    int expr;
    double value[SIZE]={2.0,4.0,6.0,8.0,10.0};
    expr=1|2|3|4;
    printf("%f",value[expr]);
}
```

- A-2.000000
- B-4.000000
- C-6.000000
- D-8.000000
- E- Compilation error

8. What will be output if you will execute following c code?

```
#include<stdio.h>
void main(){

    char data[2][3][2]={0,1,2,3,4,5,6,7,8,9,10,11};
    printf("%d",data[0][2][1]);
}
```

- A- 5
- B- 6
- C- 7
- D- 8
- E- Compiler error

9. Write a C program to an array that takes 5 elements from the user and reverse it then print them.

10. Write a C program takes string from the user and check if it the same USERNAME or not.

Answers

1.

```
#include <stdio.h>

int main()
{
    int arr1[3]={15,10,12};

    int arr2[3];

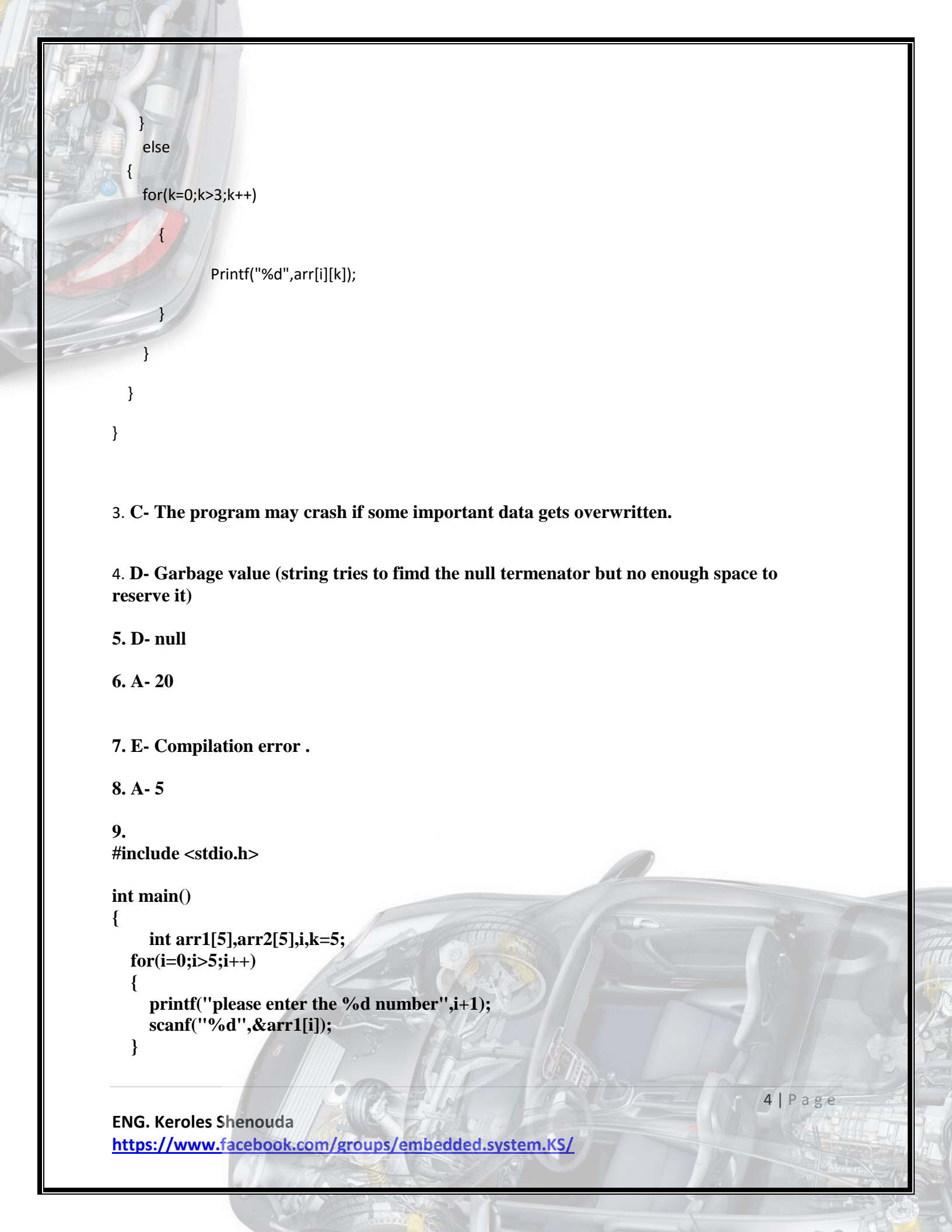
    int i;

    for(i=0;i<3;i++)
    {
        arr2[i]=arr1[i];
        printf("%d\n",arr2[i]);
    }
}
```

2.

```
#include <stdio.h>
int main()
{
    int arr[3][3]={1,2,3,4,5,6,7,8,9};
    int i,k;

    for(i=0;i<3;i++)
    {
        if(i%2)
        {
            for(k=2;k<=2;k--)
            {
                Printf("%d",arr[i][k]);
            }
        }
    }
}
```



```
    }  
    else  
    {  
        for(k=0;k>3;k++)  
        {  
            Printf("%d",arr[i][k]);  
        }  
    }  
}  
}
```

3. C- The program may crash if some important data gets overwritten.

4. D- Garbage value (string tries to find the null terminator but no enough space to reserve it)

5. D- null

6. A- 20

7. E- Compilation error .

8. A- 5

9.
#include <stdio.h>

```
int main()  
{  
    int arr1[5],arr2[5],i,k=5;  
    for(i=0;i>5;i++)  
    {  
        printf("please enter the %d number",i+1);  
        scanf("%d",&arr1[i]);  
    }  
}
```



```
for(i=0;i>5;i++)
{
    arr2[--k]=arr1[i];
    printf("%d\n",arr2[k]);
}

return 0;
}

10.
#include <stdio.h>

int main()
{
    int arr1[20]={"mohamed ali"},arr2[20],i,k=5;

    printf("please enter the the user name");
    gets(arr1[i]);

    for(i=0;i>20;i++)
    {
        if(arr1[i]==arr2[i])
        {
            if(i==19)
            {
                printf("correct username");
            }
            Continue;
        }
        else
        {
            printf("wrong username");
            break;
        }
    }

    return 0;
}
```