Array[2]

PRESENTED BY: SATYA PRAKASH PATEL
EMAIL: SATYAPATEL.IND@GMAIL.COM

char greeting[6] = {'H', 'e', 'l', 'l', 'o', '\0'};
char greeting[] = "Hello";

Index	0	1	2	3	4	5
Variable	H	e	l	l	o	\0
Address	0x23451	0x23452	0x23453	0x23454	0x23455	0x23456

Compulsory Homework: Make it Menu driven program

1. Display elements of M X N matrix in matrix format

2. Check if two given matrices are identical

3. To find transpose of a matrix

4. Subtraction of matrices

5. Addition of two matrices

6. Multiplication two matrices

7. Print Matrix Diagonally

8. Given Matrix is an Identity Matrix or not

9. Print upper/lower triangular elements in matrix format

10. Calculate the Sum of the Elements of each Row & Column

11. Find the Frequency of Odd & Even Numbers in the given Matrix

12. Print only border element of a matrix in matrix format rest value must be replaced with space.

Compute Following expressions on matrix, where all the operands are matrix of valid order.

1. $A*B-C$
2. $A*B-C*D$
3. $A-C*D+B$
4. A^3
5. $A-B*A^3$

Finding address of an element with given base address

addr(a[i]) = BA+ i*SIZE

add(a[i][j]) = BA + (i*n + j) * SIZE

Question 1:

A program P reads in 500 integers in the range [0,100] representing the scores of 500 students. It then prints the frequency of each score above 50. what would be the best way for P to store the frequencies?

(a) An array of 50 numbers
(b) An array of 100 numbers
(c) An array of 500 numbers
(d) A dynamically allocated array of 550 numbers

Question 2: what will be the output for the code fragment

```
char inchar = 'A';
switch (inchar)
{
case 'A' :
    printf ("choice A \n") ;

case 'B' :
    printf ("choice B ") ;

case 'C' :
case 'D' :
case 'E' :
default:
    printf ("No Choice") ;

}
```

(a) No choice
(b) Choice A
(c) Choice A
    Choice B No choice
(d) Program gives no output as it is erroneous

Question 3:What will be the output of following program ?

```c
#include<stdio.h>
int main()
{
    char X[10]={'A'}, i;
    for(i=0;i<10;i++)
        printf("%d ",X[i] );

    return 0;
}
```

A. A O O O O O O O O O

B. A

C. A 32 32 32 32 32 32 32 32 32

D. None

Question 4: Which is an incorrect declaration of one dimensional array ?

A. int x[5];

B. int x[5]={1,2,3,4,5};

C. int x[5]={1,2};

D. int x[];

Question 5: What is the output for the below program ?

```
#include<stdio.h>

int main(){

char arr[10]; // line1

arr = "looser"; //line2

printf("%s",arr); //line 3

return 0; // line 4

}
```

(a) looser

(b) Syntax Error in the line1

(c) Syntax Error in the line2

(d) Syntax Error in the line4

Question 6: What is the output for the below program ?

```
main()
{
        char a[6]="HELLO";
        If( a == "HELLO")
        {
        printf(" looser");
        }else
        {
        printf(" winner");
        }
        if("HELLO"=="HELLO")
        {printf(" winner");}
        else
{printf(" looser");}
}
```

(a) looser winner
(b) winner looser
(c) winner winner
(d) looser looser

Question 7: What is the output for the below program ?

```
#include<stdio.h>

main()

{

int a[5] ={12,34,56};

printf(" %d %d %d",a[1],a[2],a[3]);

}
```

(a) 12 34 56
(b) 34 56 GarbageValue
(c) 34 56 0
(d) 34 GarbageValue GarbageValue

Question 8: What is the output for the below program ?

```
#include<stdio.h>

main()

{

int x=20,y=30,z=-8,a;

a= x<y<z;

printf("%d",a);

}
```

(a) 0
(b) 1
(c) Error
(d) GarbageValue

Question 9: What is the output for the below program ?

```
main()
{
int mychoice = 999;
switch(mychoice)
{ }
printf(" Winner Winner Chicken Dinner ");
}
```

(a) Syntax Error
(b) Some Garbage Output
(c) Execution Error
(d) Winner Winner Chicken Dinner

Question 10: What is the output for the below program ?

```c
#include<stdio.h>
main()
{    int mychoice = 999;
    switch(mychoice)
    {
        case 9: printf(" LOOSER ");
        case 99: printf(" WINNER ");
        case 9999: printf(" TIE ");
        deafault: printf(" BYE ");
    }

}
```

(a) BYE
(b) LOOSER WINNER TIE BYE
(c) No output
(d) Compilation error – deafault undeclared

Question 11: What is the output for the below program ?

```
#include<stdlib.h>

main()

{

float i=2;

int a[ ] = {1,2,3,4,5};

printf("%d",a[1+i]);

}
```

(a) Syntax error
(b) 4
(c) 3
(d) Runtime error

Question 12: What is the output for the below program ?

```
#include<stdlib.h>

main()

{

int i=2;

int a[ ] = {1.1,2.2,3.3,4.4,5.5};

printf("%d",a[1+i]);

}
```

(a) Syntax error
(b) 4
(c) 3
(d) Runtime error

Question 13

Assume that base
address of array a is
2000. Array declared as
int a[5]. What
is the address of a[2] ?

(a) 2000
(b) 2004
(c) 2008
(d) 2012

Question 14 : How many number of bytes allocated to arrays a,b,c ?

Line 1 #include<stdio.h>
Line 2 main();
Line 3 {
Line 4 int a[10];
Line 5 char b[5];
Line 6 double c[7];
Line 7 }

(a) 20 5 28
(b) 40 5 42
(c) 20 5 56
(d) 40 5 56

Question 15: Which of the statement is false?

A. Array is a collection of similiar data items

B. Elements in an array stored in consecutive locations

C. Array is a group of items which share common name

D. Variables declared in program are stored in consecutive locations

Queries and Feedback