

Started on	Saturday, 8 May 2021, 11:00 AM
State	Finished
Completed on	Saturday, 8 May 2021, 11:30 AM
Time taken	29 mins 58 secs
Grade	92.50 out of 100.00

Question 1

Correct

Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
char months[4][10] = {"february", "april", "june", "september"};
char *arr[4];
int i;
char *temp;
for(i = 0; i < 4; i++)
    arr[i] = months[i];
if (strcmp(arr[0],arr[1]) > 0)
{
    temp = arr[0];
    arr[0] = arr[1];
    arr[1] = temp;
}
if (strcmp(arr[2],arr[3]) > 0)
{
    temp = arr[2];
    arr[2] = arr[3];
    arr[3] = temp;
}
for(i = 0; i < 4; i++)
    printf("%s ",arr[i]);
```

Select one:

☐ a. february april september june

☒ b. april february june september ✓

☐ c. february april june september

☐ d. april february september june

The correct answer is: april february june september

Question 2

Correct

Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
int f()
{
    static int x;
    x++;
    printf("%d ", x);
}

int g()
{
    int x = 0;
    x++;
    printf("%d ", x);
}

int main()
{
    f();
    g();
    f();
    g();

    return 0;
}
```

Select one:

- ☐ a. 0010
- ☐ b. 0000
- ☒ c. 1 1 2 1 ✓
- ☐ d. 1 1 1 1

The correct answer is: 1 1 2 1

Question 3

Correct

Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
int a[10];
int *b = &a[2], *c = &a[5];
int dif = c - b;
printf("%d", dif);
```

Select one:

- ☐ a. 5
- ☐ b. 8
- ☐ c. 6
- ☒ d. 3 ✓

The correct answer is: 3

Question 4

Correct

Mark 5.00 out of 5.00

Which of the following program segments produces the following output?

12 21

Select one:

☐ a. The code given below:

```
int i = 12, j;  
int *p, *p1;  
p = &i;  
p1 = &j;  
j = 21;  
printf ("%d %d", p, p1);
```

☒ b. The code given below:

```
int i = 12, j = 21;  
int *p, *p1;  
p = &i;  
p1 = &j;  
printf("%d %d", *p, *p1);
```

☐ c. The code given below:

```
int i = 12, j;  
int *p, *p1;  
p = i;  
p1 = j;  
j = 21;  
printf ("%d %d", *p, *p1);
```

☐ d. The code given below:

```
int i = 12, j = 21;  
int p, p1;  
p = &i;  
p1 = &j;  
printf ("%d %d", *p, *p1);
```

The correct answer is: The code given below:

```
int i = 12, j = 21;  
int *p, *p1;  
p = &i;  
p1 = &j;  
printf("%d %d", *p, *p1);
```

Question 5

Correct

Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
char name[25] = "CMPE252";  
char day[25] = "WEDNESDAY";  
strncat (name, day+6, 6);  
printf ("%s", name);
```

Select one:

- ☒ a. CMPE252DAY ✓
- ☐ b. CMPE252WEDNESDAY
- ☐ c. WEDNESDAY2
- ☐ d. CMPE252WEDNES
- ☐ e. CMPE252NESDAY

The correct answer is: CMPE252DAY

Question 6

Correct

Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
char str1[] = "CMPEStudents", str2[] = "Hello";
printf("%s",str1+strlen(str2));
```

Select one:

- ☐ a. CMPES
- ☒ b. tudents ✓
- ☐ c. CMPEStudentsHello
- ☐ d. Students

The correct answer is: tudents

Question 7

Correct

Mark 7.50 out of 7.50

What is the output of the program segment given below?

```
char chr[30];
char *str = "newstring";
int length = strlen(str);
int a;
for (a = 0; a < length; a++)
    chr[a] = str[length - a];
printf("%s",chr);
```

Select one:

- ☐ a. g
- ☐ b. n
- ☐ c. newstring newstring
- ☐ d. newstring
- ☒ e. (Nothing will be printed on the display.) ✓

The correct answer is:
(Nothing will be printed on the display.)

Question 8

Correct

Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
char days[30] = "mon-day,tues-day,wednes-day";
char *ptr1, *ptr2, *ptr3;
ptr1 = strtok(days,"-");
ptr2 = strtok(NULL,"-");
ptr3 = strtok(NULL,"-");
printf("%s%d%s",ptr1,strlen(ptr2),ptr3);
```

Select one:

- ☐ a. mon8day
- ☐ b. mon-4tues-
- ☐ c. mon3tues-day
- ☐ d. mon-day8wednes-day
- ☒ e. mon3tues ✓

The correct answer is: mon3tues

Question 9

Incorrect

Mark 0.00 out of 2.50

The condition `str1 < str2` is true if the string value of `str1` alphabetically precedes the string value of `str2`.

Select one:

- ☒ True ✖
- ☐ False

The correct answer is 'False'.

Question
10

Correct

Mark 5.00 out of
5.00

Which of the followings DOES NOT involve an invalid memory access?

Select one:

- ☐ a. The code given below:

```
int main()
{
    int *p = (int *) malloc(3*sizeof(int));

    if (p == NULL)
    {
        return 1;
    }

    *p = 10;
    *(p+1) = 20;
    *(p+2) = 30;

    free(p);

    for (int i = 0; i < 3; i++)
        printf("%d ",p[i]);

    return 0;
}
```

- ☐ b. The code given below:

```
int main()
{
    int *p = (int *) malloc(3*sizeof(int));

    if (p == NULL)
    {
        return 1;
    }

    *p = 10;
    *(p+1) = 20;
    *(p+2) = 30;

    p = (int *) realloc(p, 2*sizeof(int));

    for (int i = 0; i < 3; i++)
        printf("%d ",p[i]);

    free(p);

    return 0;
}
```

- ☐ c. The code given below:

```
int main()
{
    int *p = (int *) malloc(3*sizeof(int));

    if (p == NULL)
    {
        return 1;
    }

    *p = 10;
    *(p+1) = 20;
    *(p+2) = 30;
    *(p+3) = 40;

    free(p);

    return 0;
}
```

- ☒ d. The code given below:

```
int main()
{
    int *p = (int *) malloc(3*sizeof(int));

    if (p == NULL)
    {
        return 1;
    }

    *p = 10;
    *(p+1) = 20;
    *(p+2) = 30;

    p = (int *) realloc(p, 4*sizeof(int));

    for (int i = 0; i < 3; i++)
        printf("%d ", p[i]);

    free(p);

    return 0;
}
```



The correct answer is: The code given below:

```
int main()
{
    int *p = (int *) malloc(3*sizeof(int));

    if (p == NULL)
    {
        return 1;
    }

    *p = 10;
    *(p+1) = 20;
    *(p+2) = 30;

    p = (int *) realloc(p, 4*sizeof(int));

    for (int i = 0; i < 3; i++)
        printf("%d ",p[i]);

    free(p);

    return 0;
}
```

Question 11

Correct
Mark 2.50 out of 2.50

The assignment operator = can be used for string assignment only when initializing a string variable in its declaration.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 12

Correct
Mark 6.00 out of 6.00

What is the output of the program segment given below?

```
char str[] = "Cmpe252";
int sum = 0;
for (int i = 0; i < strlen(str); i++)
{
    if (isalpha(str[i]))
    {
        if (isupper(str[i]))
            sum += 10;
        else
            sum += 100;
    }
    if (isdigit(str[i]))
        sum += 1000;
}
printf("%d", sum);
```

Answer: ✓

The correct answer is: 3310

Question
13

Correct
Mark 5.00 out of 5.00

Which one combines the two given statements into one?

```
char *ptr;  
ptr = (char*) malloc(23);
```

Select one:

- ☐ a. char ptr = (char*) malloc(23);
- ☐ b. char *ptr = (char) malloc(23);
- ☐ c. (char) ptr = char*malloc(23);
- ☒ d. char *ptr = (char*) malloc(23); ✓
- ☐ e. *ptr = (char*) malloc(23);

The correct answer is: char *ptr = (char*) malloc(23);

Question
14

Correct
Mark 5.00 out of 5.00

What is the output of the program segment given below? (Note that size of char is 1 byte.)

```
char str[30] = "CMPE252";  
printf("%d%d", strlen(str), sizeof(str));
```

Answer: ✓

The correct answer is: 730

Question
15

Incorrect
Mark 0.00 out of 5.00

What is the output of the program segment given below?

```
char str[10];  
int x;  
double y;  
sscanf(" 7.8 cmpe252 345 ", "%lf%s%d", &y, str, &x);  
printf("%.2f %s %d", y, str, x);
```

Select one:

- ☐ a. None of these
- ☐ b. 7.80 cmpe252 345
- ☐ c. 7.00 . 80
- ☒ d. 7.80 cmpe 252 ✗

The correct answer is: 7.80 cmpe252 345

Question
16

Correct
Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
char name[25] = "CMPE252";  
char day[25] = "WEDNESDAY";  
strncpy(day, name+4, 3);  
printf("%s", day);
```

Select one:

- ☐ a. WEDN252AY
- ☐ b. CMPEWED
- ☒ c. 252NESDAY ✓
- ☐ d. CMPE252WED
- ☐ e. WEDNESDAY252

The correct answer is: 252NESDAY

Question
17

Correct

Mark 2.50 out of 2.50

If the two strings are identical, then strcmp() function will return

Select one:

- ☐ a. None of these
- ☒ b. 0 ✓
- ☐ c. 1
- ☐ d. -1

The correct answer is: 0

Question
18

Correct

Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
char str[30] = "helloworld";  
  
memmove(str+7, str+5, 6*sizeof(char));  
  
printf("%s", str);
```

Select one:

- ☒ a. hellowoworld ✓
- ☐ b. hellowowor
- ☐ c. hellorld
- ☐ d. helloworld

The correct answer is: hellowoworld

Question
19

Correct

Mark 9.00 out of 9.00

What is the output of the program segment given below?

```
int a, b;  
for (a = 2; a < 30; a++)  
{  
    for (b = 2; b <= (a/b); b++)  
        if (!(a%b))  
            break;  
    if (b > (a/b))  
        printf ("%d ", a);  
}
```

Select one:

- ☐ a. 1 5 7 11 15 21 27
- ☒ b. 2 3 5 7 11 13 17 19 23 29 ✓
- ☐ c. 2 3 7 13 17 19 27
- ☐ d. 2 5 7 9 15 17 19 23 29

The correct answer is: 2 3 5 7 11 13 17 19 23 29

Question
20

Correct

Mark 5.00 out of 5.00

What is the output of the program segment given below?

```
int a[5] = {1,2,3,4,5};
int b[5] = {10,20,30,40,50};

memcpy(a,b,3*sizeof(int));

for (int i = 0; i < 5; i++)
    printf("%d ", a[i]);
```

Select one:

- ☐ a. 1 2 3 40 50
- ☒ b. 10 20 30 4 5 ✓
- ☐ c. 1 2 3 4 5
- ☐ d. None of these
- ☐ e. 10 20 30 40 50

The correct answer is: 10 20 30 4 5