

## COP 3514 Practice Test 2, Answer Keys

- 1) 1)34    2)-4    3) 13
- 2) 11
- 3) 10 9 8 7 6 6 7 8 9 10
- 4) 6
- 5) 6
- 6) 'u'
- 7) 2
- 8) Line 19
- 9) DesignProgram
- 10) B
- 11) D
- 12) C
- 13) A

14)

```
//solution 1:
```

```
swap(w[0], w[2]);
```

```
swap(w[1], w[2]);
```

```
//solution 2:
```

```
swap(w[1], w[2]);
```

```
swap(w[0], w[1]);
```

15)

```
void split_time(int total_sec, int *hr, int *min, int *sec){
```

```
    *hr = total_sec / 3600;
```

```
    *min = total_sec % 3600 / 60;
```

```

    *sec = total_sec % 3600 % 60;
}

```

16)

```

void replace(char *str, char x, char y) {
    char *p;
    for(p = str; *p!='\0'; p++)
        if(*p == x)
            *p = y;
}

```

17)

```

void edge(int n, int *a1, int *a2) {
    int *p, *q=a2;
    *q+=0;
    for (p = a1;p<a1+n; p++,q++)
        if(*p==*(p-1))
            *q=0;
        else
            *q=1;
}

```

18)

```

void get_extension(char *file_name, char *extension) {
    char *p;

    for (p= file_name; *p!= '\0'; p++)
        if(*p == '.')
            break;

    if(*p!= '\0'){

```

```

        for(p=p+1; *p!='\0'; p++)
            *extension++ = *p;
    }
    *extension = '\0';
}

```

19)

```

int is_all_uppercase(char str[]) {
    int flag = 1;
    int n = strlen(str);
    for(int i=0; i < n; i++) {
        if(islower(str[i])) {
            flag = 0;
            break;
        }
    }
    return flag;
}

```

//pointer version

```

int is_all_uppercase(char str[]) {
    int flag = 1;
    char *p;
    for(p =str; *p !='\0'; p++) {
        if(islower(*p)) {
            flag = 0;
            break;
        }
    }
}

```

```
    return flag;
}
```

20)

```
. void shift(char *message, int shift) {
    char *p;
    for(p = message; *p != '\0'; p++)
    {
        if(*p >='A' &&*p<='Z') //if(isupper(*p)) is also acceptable
            *p =(*p - 'A' + shift)%26 + 'A';

        if(*p >='a' &&*p<='z') //if(islower(*p)) is also acceptable
            *p =(*p - 'a' + shift)%26 + 'a';
    }
}
```