

CS101 – Computer Programming

Quiz for Monday Batch – 13 October 2014

Q1. Given below is the program to calculate the exponent of a number. A function '**exponent**' is defined and implemented using pointers as follows:

```
#include<iostream>
using namespace std;
float* exponent (float* number, int power){
    float val=1;
    for(int i=0;i<power;i++){
        val *= *number;
    }
    *number = val;
    return(number);
}
int main(){
    float *result, base;
    int n;
    cout<<"Give base and power: ";
    cin>>base>>n;
    result = exponent(&base, n);
    cout<<"The answer is: "<<*result;
    return 0;
}
```

Choose the correct option(s) from the following:

- A. The above function call is an example of '**call-by-value**'.
- B. Instead of returning '**number**' from the function we can also return '**&val**'.
- C. '**&base**' and '***number**' are of the same type and hold the same value.
- D. '**number**' is a pointer variable of type float while '**base**' is a float variable.
- F. None of these

Q2. Mr. Dumbo wants to write a function '**reverseStr**' that will reverse a given string.

For example, if the string passed to the function is "**dumbo**", then the function should return "**obmud**". He wrote the following code fragment but was not able to complete.

```
char* reverseStr(char* str){
    int len = strlen(str);
    //Write code here
}
```

Please help Mr. Dumbo by choosing the correct option from the following:

- A.

```
for (int i =0; i < len; i++){
    char temp = str[len-i-1]; str[len-i-1] = str[i];
    str[i]=temp;
}
return str;
```

- B.** `for (int i =0; i < len/2; i++){`
 `char temp = str[len-i-1]; str[len-i-1] = str[i];`
 `str[i]=temp;`
 `}`
 `return str;`
- C.** `for (int i =0; i < len/2; i++){`
 `str[len-i-1] = str[i]; str[i]=str[len-i-1];`
 `}`
 `return str;`
- D.** None of the above