

C++ Programming Assignment - 23

1. What is difference malloc and new, free and delete?
2. Write a syntax which is used to allocate memory for 10 integers dynamically using malloc.
3. Write a syntax which is used to allocate memory for 10 integers dynamically using realloc.
4. What is mean by dangling pointer?
5. What is the return value of malloc function if memory manager is unable to allocate the memory?
6. Write a syntax which is used to allocate memory for N floats dynamically using malloc. Accept the value of N from user at run time.
7. Allocate dynamic memory for array of 5 element where each element is below structure.

```
struct hello
{
    float f;
    int i;
};
```

8. Explain internal working of new operator in detail?
9. What is the need of typecasting for the return value of malloc function?
10. Explain working of below application , draw its diagrammatic representation and predict its output.

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

int main()
{
    int size = 0;
    int *p = NULL;
    int icnt = 0;

    printf("Enter number of elements\n");
    scanf("%d",&size);

    p = (int *)malloc(size * sizeof(int));
```

```
printf("Please enter elements");

for(icnt = 0; icnt < size; icnt++)
{
    scanf("%d",&p[icnt]);
}

printf("Enntered elements are");

for(icnt = 0; icnt < size; icnt++)
{
    printf("%d",p[icnt]);
}

free(p);

return 0;
}
```

