Question1

```
#include <stdio.h>
int main(){
  int marks;
  printf("Enter your marks out of 100 :");
  scanf("%d", &marks);
  if(marks > 0 || marks <= 100){
    switch(marks/10){
      case 10:
        printf("Grade A+\n");
        break;
      case 9:
        printf("Grade A+\n");
        break;
      case 8:
        printf("Grade A\n");
        break;
      case 7:
          printf("Grade B+\n");
          break;
      case 6:
          printf("Grade B\n");
          break;
      case 5:
          printf("Grade C+\n");
          break;
      case 4:
          printf("Grade C\n");
          break;
      case 3:
          printf("Grade D\n");
          break;
      case 2:
          printf("Grade F\n");
          break;
      case 1:
          printf("Grade F\n");
          break;
      default:
        printf("Grade F\n");
    }
  }
  else{
    printf("Your marks is invalid");
  }
}
```

Question2

```
#include <stdio.h>
int main(){
  char vowel;
  printf("Enter any alphabet to check vowel sound : ");
```

```
  scanf("%c", &vowel);
  switch(vowel){
    case 'A':
      printf("The alphabet is vowel sound");
      break;
    case 'a':
      printf("The alphabet is vowel sound");
      break;
    case 'E':
      printf("The alphabet is vowel sound");
      break;
    case 'e':
      printf("The alphabet is vowel sound");
      break;
    case 'I':
      printf("The alphabet is vowel sound");
      break;
    case 'i':
      printf("The alphabet is vowel sound");
      break;
    case 'O':
      printf("The alphabet is vowel sound");
      break;
    case 'o':
      printf("The alphabet is vowel sound");
      break;
    case 'U':
      printf("The alphabet is vowel sound");
      break;
    case 'u':
      printf("The alphabet is vowel sound");
      break;
    default:
      printf("The given alphabet is consonant sound");
  }
}
```

Question3

```
#include <stdio.h>
int main(){
  int amount;
  int debit;
  int Credit;
  int mainbalance;
  int Option;
  printf("Deposit your initial amount : ");
  scanf("%d", &amount);
  if(amount > 1000){
    printf("1. Credit \n");
    printf("2. Debit \n");
    printf("1. Balance enquiry \n");
    printf("Enter your option : ");
```

```
    scanf("%d", &Option);
    switch(Option){
      case 1:
        printf("Enter the amount you want to credit : ");
        scanf("%d", &Credit);
        mainbalance = amount + Credit;
        printf("Your bank balance is : %d", mainbalance);
        break;
      case 2:
        printf("Enter the amount you want to debit : ");
        scanf("%d", &debit);
        mainbalance = amount - debit;
        if(mainbalance < 0){
          printf("Your bank balance is zero");
        }
        else{
          printf("Your bank balance is : %d", mainbalance);
        }
        break;
      case 3:
          printf("Your bank balance is : %d", amount);
          break;
      default:
        printf("Your option is out of choice");
      }
  }
  else{
    printf("Your initial amount is not enough to deposit");
  }
}
```

Question4

```
#include <stdio.h>
int checksize(intType,floatType,doubleType,charType,shortType,longType)
int intType;
float floatType;
double doubleType;
char charType;
short shortType;
long longType;
{
  // sizeof evaluates the size of a variable
   printf("Size of int: %ld bytes\n", sizeof(intType));
   printf("Size of float: %ld bytes\n", sizeof(floatType));
   printf("Size of double: %ld bytes\n", sizeof(doubleType));
   printf("Size of char: %ld byte\n", sizeof(charType));
   printf("Size of short: %ld byte\n", sizeof(shortType));
   printf("Size of long: %ld byte\n", sizeof(longType));
}


int checksignedsize(charType1,longType1,shortType1)
```

```
signed short shortType1;
signed long longType1;
signed char charType1;
{
  printf("Size of signed-short: %ld bytes\n", sizeof(shortType1));
  printf("Size of signed-long: %ld bytes\n", sizeof(longType1));
  printf("Size of signed-char: %ld byte\n", sizeof(charType1));
}

int main(){
  int intType;
  float floatType;
  double doubleType;
  char charType;
  short shortType;
  long longType;
  signed short shortType1;
  signed char charType1;
  signed long longType1;
  checksize();
  checksignedsize();
}
```